

Title (en)

INJECTOR FOR BLOWING A GAS INTO A COMBUSTION CHAMBER OR INTO AN INTAKE MANIFOLD OF A MOTOR VEHICLE

Title (de)

INJEKTOR ZUM EINBLASEN EINES GASES IN EINEN BRENNRAUM ODER IN EIN SAUGROHR EINES KRAFTFAHRZEUGES

Title (fr)

INJECTEUR POUR INSUFFLER UN GAZ DANS UNE CHAMBRE DE COMBUSTION OU DANS UNE TUBULURE D'ADMISSION D'UN VÉHICULE AUTOMOBILE

Publication

EP 4288654 A1 20231213 (DE)

Application

EP 22702867 A 20220201

Priority

- DE 102021000617 A 20210202
- EP 2022000012 W 20220201

Abstract (en)

[origin: WO2022167145A1] The injector has an injector needle (2) by means of which an outlet opening (4) of an injector housing (1) can be closed. The injector needle (2) can be adjusted in pressure-controlled fashion from a closed position into an open position. The injector needle (2) is axially fixedly connected to a piston (26) which is under closing pressure in one direction so that the injector needle (2) closes the outlet opening (4). In the other direction, the piston (26) and thus the injector needle (2) can be displaced by a valve-controlled control pressure, whereby the injector needle (2) passes into its open position and releases the outlet opening (4).

IPC 8 full level

F02M 21/02 (2006.01); **F02M 47/02** (2006.01); **F02M 47/04** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)

F02M 21/02 (2013.01 - EP); **F02M 21/0269** (2013.01 - EP KR); **F02M 47/027** (2013.01 - US); **F02M 51/0603** (2013.01 - US); **F02M 61/08** (2013.01 - KR); **F02M 61/12** (2013.01 - US); **F02M 61/168** (2013.01 - US); **F02M 61/08** (2013.01 - EP); **F02M 2200/8007** (2013.01 - EP KR); **Y02T 10/30** (2013.01 - EP KR)

Citation (search report)

See references of WO 2022167145A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021000617 A1 20220804; CN 116997710 A 20231103; EP 4288654 A1 20231213; JP 2024504876 A 20240201; KR 20230137442 A 20231004; US 2024102436 A1 20240328; WO 2022167145 A1 20220811

DOCDB simple family (application)

DE 102021000617 A 20210202; CN 202280021427 A 20220201; EP 2022000012 W 20220201; EP 22702867 A 20220201; JP 2023570331 A 20220201; KR 20237029753 A 20220201; US 202218273765 A 20220201