

Title (en)

EXHAUST AFTERTREATMENT DEVICE FOR DOSING A LIQUID EXHAUST AFTERTREATMENT AGENT

Title (de)

ABGASNACHBEHANDLUNGSEINRICHTUNG ZUM EINDOSIEREN EINES FLÜSSIGEN ABGASNACHBEHANDLUNGSMITTELS

Title (fr)

DISPOSITIF DE RETRAITEMENT DE GAZ D'ÉCHAPPEMENT PERMETTANT L'INTRODUCTION DOSÉE D'UN AGENT DE RETRAITEMENT DE GAZ D'ÉCHAPPEMENT

Publication

EP 3752721 B1 20220330 (DE)

Application

EP 19700042 A 20190103

Priority

- DE 102018202298 A 20180215
- EP 2019050067 W 20190103

Abstract (en)

[origin: WO2019158269A1] The invention relates to an exhaust aftertreatment device (7) for metering a liquid aftertreatment agent into an exhaust stream of an internal combustion engine, comprising a mixing chamber (22), in which the exhaust aftertreatment agent is mixed with the exhaust stream, a mixing chamber (22) having a circularly cylindrical mixing pipe (8), which has a funnel-shaped end section (9) widening the periphery toward a free end, having a funnel element (17) opening at least partly conically in the direction of the mixing pipe (8), which has a plurality of passage openings (18) in the lateral wall (19) of the funnel element, and wherein an injection valve (21) for the exhaust aftertreatment agent is arranged at the end of the funnel element (17) that faces away from the mixing tube (8), in order to inject the exhaust aftertreatment agent into the funnel element (17). According to the invention, the funnel element (17) is located at least substantially within the end section (9), coaxially with respect to the end section, and at least some of the passage openings (18) are each assigned a flow element (20) rising up from the lateral wall (19) to produce a swirling flow in the mixing pipe (8).

IPC 8 full level

F01N 3/28 (2006.01); **F01N 13/00** (2010.01)

CPC (source: EP)

B01F 23/2132 (2022.01); **B01F 25/10** (2022.01); **B01F 25/3131** (2022.01); **F01N 3/2892** (2013.01); **F01N 13/009** (2014.06); **B01F 2025/931** (2022.01); **F01N 2240/20** (2013.01); **F01N 2260/06** (2013.01); **F01N 2610/02** (2013.01); **F01N 2610/03** (2013.01)

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

DOCDB simple family (publication)

WO 2019158269 A1 20190822; CN 111742123 A 20201002; CN 111742123 B 20220614; DE 102018202298 A1 20190822; EP 3752721 A1 20201223; EP 3752721 B1 20220330

DOCDB simple family (application)

EP 2019050067 W 20190103; CN 201980013615 A 20190103; DE 102018202298 A 20180215; EP 19700042 A 20190103