

Title (en)

METHOD FOR OPERATING A DEVICE FOR INJECTING WATER INTO AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUM BETRIEB EINER VORRICHTUNG ZUR WASSEREINSPIRZUNG IN EINE BRENNKRAFTMASCHINE

Title (fr)

PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER UN DISPOSITIF D'INJECTION D'EAU DANS UN MOTEUR À COMBUSTION INTERNE

Publication

EP 3292288 A1 20180314 (DE)

Application

EP 16717331 A 20160413

Priority

- DE 102015208509 A 20150507
- EP 2016058099 W 20160413

Abstract (en)

[origin: WO2016177544A1] Method for operating a device (1) for injecting water into an internal combustion engine, wherein the device (1) has – a water tank (3) for storing water, – a pump (4) for delivering the water, wherein the pump (4) is connected to the water tank (3) via a first line, and wherein the pump (4) can be operated in a delivery mode and in a back-suction mode, – a drive (5) for driving the pump (4), – at least one water injector (6) which is designed for injecting water into an air-conducting line (7) of the internal combustion engine (2), wherein the water injector (6) is connected to the pump (4) via a second line (11), wherein, during the operation of the pump (4) in the back-suction mode, in which the water is delivered in the direction of the water tank (3), the at least one water injector (6) is opened such that air flows into the second line (11).

IPC 8 full level

F02D 41/00 (2006.01); **F02M 25/035** (2006.01)

CPC (source: EP US)

F02D 41/0025 (2013.01 - EP US); **F02M 25/0227** (2013.01 - EP US); **F02M 25/028** (2013.01 - EP US); **F02M 25/035** (2013.01 - EP US)

Citation (search report)

See references of WO 2016177544A1

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)

WO 2016177544 A1 20161110; CN 107580654 A 20180112; CN 107580654 B 20210202; DE 102015208509 A1 20161110;
EP 3292288 A1 20180314; EP 3292288 B1 20210609; US 10704499 B2 20200707; US 2018112632 A1 20180426

DOCDB simple family (application)

EP 2016058099 W 20160413; CN 201680026560 A 20160413; DE 102015208509 A 20150507; EP 16717331 A 20160413;
US 201615567803 A 20160413