

Title (en)

LARGE DIESEL ENGINE AND FUEL INJECTION NOZZLE AND FUEL INJECTION METHOD FOR A LARGE DIESEL ENGINE

Title (de)

BRENNSTOFFEINSPRITZDÜSE UND BRENNSTOFFEINSPRITZVERFAHREN FÜR EINEN GROSSDIESELMOTOR, SOWIE GROSSDIESELMOTOR

Title (fr)

BUSE D'INJECTION DE CARBURANT ET PROCÉDÉ D'INJECTION DE CARBURANT POUR UN GROS MOTEUR DIESEL AINSI QUE GROS MOTEUR DIESEL

Publication

EP 3483420 B1 20200617 (DE)

Application

EP 18200303 A 20181015

Priority

EP 17201409 A 20171113

Abstract (en)

[origin: CN109779802A] The invention relates to a fuel nozzle and a fuel injection method for a large diesel engine and the large diesel engine. The fuel nozzle is provided with a nozzle head (3), a fuel pipe (4), a valve body (6) and a valve seat (11). Wherein the nozzle head (3) has at least one nozzle opening (30) through which fuel can be introduced into the combustion chamber (50); Fuel energy is introduced into the pressure chamber (5) through the fuel pipe (4); The valve body (6) is loaded with a spring (12), and the valve body (6) comprises a valve piston (61) and a nozzle needle valve (62); The valve seat (11) is designed to cooperate with the nozzle needle valve (62) such that, in the open state, the flow connection between the pressure chamber (5) and the nozzle head (3) is opened by the stroke of the valve body (6), and in the closed state, the nozzle needle valve (62) cooperates with the valve seat (11) in a sealed manner such that the flow connection between the pressure chamber (5) and the nozzle head (3) is closed.

IPC 8 full level

F02M 45/08 (2006.01); **F02D 41/40** (2006.01); **F02M 47/02** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR)

F02D 41/20 (2013.01 - EP); **F02M 45/086** (2013.01 - EP); **F02M 47/027** (2013.01 - EP); **F02M 51/061** (2013.01 - KR); **F02M 61/18** (2013.01 - KR); **F02M 63/0015** (2013.01 - KR); **F02M 63/0063** (2013.01 - EP); **F02B 2075/025** (2013.01 - KR); **F02M 63/0042** (2013.01 - EP); **F02M 63/0047** (2013.01 - EP); **F02M 2547/006** (2013.01 - KR)

Cited by

SE2250482A1; SE546150C2; WO2023204745A1

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)

EP 3483420 A1 20190515; **EP 3483420 B1 20200617**; CN 109779802 A 20190521; CN 109779802 B 20220517; JP 2019090407 A 20190613; JP 7319772 B2 20230802; KR 102669791 B1 20240527; KR 20190054922 A 20190522

DOCDB simple family (application)

EP 18200303 A 20181015; CN 201811227508 A 20181022; JP 2018202403 A 20181029; KR 20180129019 A 20181026