

Title (en)

COMPONENT FOR AN INJECTION SYSTEM, AND INJECTION SYSTEM FOR MIXTURE-COMPRESSING, APPLIED-IGNITION INTERNAL COMBUSTION ENGINES, AND METHOD FOR PRODUCING A COMPONENT OF THIS TYPE

Title (de)

KOMPONENTE FÜR EINE EINSPRITZANLAGE UND EINSPRITZANLAGE FÜR GEMISCHVERDICHTE, FREMDGEZÜNDETE BRENNKRAFTMASCHINEN SOWIE VERFAHREN ZUR HERSTELLUNG SOLCH EINER KOMPONENTE

Title (fr)

COMPOSANT POUR UN SYSTÈME D'INJECTION ET SYSTÈME D'INJECTION POUR DES MOTEURS À COMBUSTION INTERNE À ALLUMAGE COMMANDÉ ET À COMPRESSION DU MÉLANGE AINSI QUE PROCÉDÉ DE FABRICATION D'UN TEL COMPOSANT

Publication

**EP 4182552 A1 20230524 (DE)**

Application

**EP 21730123 A 20210526**

Priority

- DE 102020208759 A 20200714
- EP 2021064030 W 20210526

Abstract (en)

[origin: WO2022012805A1] The invention relates to a component (3), in particular fluid distributor (2), for an injection system (1) for mixture-compressing, applied-ignition internal combustion engines which apportions a fluid which is under high pressure, having a main part (14) and at least one connection piece (16A-19A) formed on the main part (14) which connects an injection valve (7-10), wherein the injection valve (7-10) can be inserted into a receiving chamber (27-30) of the connection piece (16A-19A) along an assembly axis (40-43) during assembly, wherein at least the main part (14) and the connection piece (46-49) are formed by single or multi-stage forging and wherein a recess (51, 51') is formed on an outside (52, 52') of the connection piece (46-49), into which, in an assembled state, an orientation element (50) of the injection valve (7-10) engages in order to restrict a degree of freedom of rotation of the injection valve (7-10) about the assembly axis (40-43). According to the invention, the connection piece (16A-19A) is reworked after forging such that at least one lateral face (56, 57, 56', 57') of the recess (51, 51') of the connection piece (16A-19A) on which, in the assembled state, in order to restrict a degree of freedom of rotation in a selected rotation direction (49) about the assembly axis (40-43), a contact between the orientation element (50) of the injection valve (7-10) and the connection piece (16-19A) is enabled, is designed at least approximately having a specified side height (58). Furthermore, the invention relates to an injection system having such a component (3) and to a method for producing such a component (3).

IPC 8 full level

**F02M 55/02** (2006.01); **F02M 61/14** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP US)

**F02M 55/025** (2013.01 - EP US); **F02M 61/14** (2013.01 - EP US); **F02M 61/168** (2013.01 - EP US); **F02M 2200/80** (2013.01 - EP); **F02M 2200/8023** (2013.01 - US); **F02M 2200/852** (2013.01 - EP US); **F02M 2200/853** (2013.01 - EP US); **F02M 2200/856** (2013.01 - EP US)

Citation (search report)

See references of WO 2022012805A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**DE 102020208759 A1 20220120**; CN 116057270 A 20230502; EP 4182552 A1 20230524; US 2023287852 A1 20230914; WO 2022012805 A1 20220120

DOCDB simple family (application)

**DE 102020208759 A 20200714**; CN 202180062861 A 20210526; EP 2021064030 W 20210526; EP 21730123 A 20210526; US 202118005991 A 20210526