

Title (en)

DEVICE OF A FUEL INJECTION SYSTEM AND METAL-TO-METAL SEALING CONNECTION ARRANGEMENT

Title (de)

EINRICHTUNG EINER BRENNSTOFFEINSPRITZANLAGE UND METALLISCHE DICHTENDE VERBINDUNGSANORDNUNG

Title (fr)

DISPOSITIF D'UN SYSTÈME D'INJECTION DE CARBURANT ET DISPOSITIF DE LIAISON ÉTANCHE MÉTALLIQUE

Publication

EP 3237746 A1 20171101 (DE)

Application

EP 15787538 A 20151026

Priority

- DE 102014226819 A 20141222
- EP 2015074754 W 20151026

Abstract (en)

[origin: WO2016102104A1] A device (1) of a fuel injection system has a fuel-conducting component (2) and a connecting part (3). A metal-to-metal sealing connection arrangement (4) is provided which comprises a first metal connection partner (6) and a second metal connection partner (5). The metal connection partners (5, 6) can be connected to each another with respect to an axis (12), with a conical sealing surface (15) on the first connection partner (6) and a sealing contour (19) matching the conical sealing surface (15) of the first connection partner (6) on the second connection partner (5). The sealing contour (19) of the second connection partner (5) has, in an initial state, a circumferential elevation (18) around the axis (14), said elevation facing the conical sealing surface (15) of the first sealing partner (6), wherein the sealing contour (19) of the second connection partner (5) is configured such that, with the screwing of the first connection partner (6) to the second connection partner (5), the circumferential elevation (18) of the second connection partner (5) is at least partially plastically deformed, in order to form a metal-to-metal seal between the conical sealing surface (15) of the first connection partner (6) and the elevation (18) of the second connection partner (5) that is deformed in the screwed state.

IPC 8 full level

F02M 55/00 (2006.01); **F02M 55/02** (2006.01)

CPC (source: CN EP KR)

F02M 55/004 (2013.01 - CN EP KR); **F02M 55/025** (2013.01 - CN EP KR); **F02M 2200/247** (2013.01 - CN EP KR); **F02M 2200/9053** (2013.01 - CN EP KR)

Citation (search report)

See references of WO 2016102104A1

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)

DE 102014226819 A1 20160623; CN 107110087 A 20170829; CN 107110087 B 20210427; EP 3237746 A1 20171101; EP 3237746 B1 20200930; ES 2838806 T3 20210702; KR 102447585 B1 20220928; KR 20170095886 A 20170823; PL 3237746 T3 20210406; WO 2016102104 A1 20160630

DOCDB simple family (application)

DE 102014226819 A 20141222; CN 201580070390 A 20151026; EP 15787538 A 20151026; EP 2015074754 W 20151026; ES 15787538 T 20151026; KR 20177017099 A 20151026; PL 15787538 T 20151026