

Title (en)

Fuel pump for an injection engine and process for producing it.

Title (de)

Brennstoffeinspritzpumpe für Einspritzbrennkraftmaschinen und Verfahren zur Herstellung derselben.

Title (fr)

Pompe à combustible pour moteur à injection et son procédé de fabrication.

Publication

EP 0261102 A1 19880323 (DE)

Application

EP 87890211 A 19870910

Priority

AT 244186 A 19860910

Abstract (en)

1. Fuel injection pump for injection internal combustion engines with at least one pump element, wherein an intermediated part (7), which contains the feed duct (6) for the fuel conveyed by the pump piston (3) and the pressure valve seat, is pressed sealingly against the pump piston bushing (2) with the intermediary of the pressure valve housing (8) ; and wherein the intermediate part (7) has a hollow cone shaped support surface (12) which is constructed co-axial with the pump piston bushing (2) as a sealing surface, against which is supported a conical surface (11) of the pump piston bushing (2) which is co-axial with the pump piston bushing (2), characterised in that the hollow cone shaped support surface (12) of the intermediate part (7) and the conical surface (11) of the pump piston bushing (2) is in each case surrounded by a plane sealing surface (13, 14) which is co-axial with the pump piston bushing (2) and which stands perpendicular to the pump piston bushing axis, and in that the sealing surfaces (13, 14) of the intermediate part (7) and of the pump piston bushing (2) are so dimensioned that in the assembled but non-clamped-together state, a gap exists between the plane sealing surfaces (13, 14), and in the clamped-together state the plane sealing surfaces (13, 14) lie upon one another.

Abstract (de)

Bei einer Brennstoffeinspritzpumpe für Einspritzbrennkraftmaschinen mit wenigstens einem Pumpenelement, bei welcher ein den Förderkanal (6) für den vom Pumpenkolben (3) geförderten Brennstoff und gegebenenfalls den Druckventilsitz aufweisendes Zwischenstück (7) unter Vermittlung des Druckventilgehäuses (8) dichtend gegen die Pumpenkolbenbüchse (2) gepreßt ist, sind sowohl eine hohlkegelförmige Abstützfläche (12) und eine Kegelfläche (11) der Pumpenkolbenbüchse (2) sowie ebene, senkrecht zur Pumpenkolbenachse liegenden Dichtungsflächen (13,14) vorgesehen, welche so bemessen sind, daß in unzusammengespanntem Zustand ein Spalt zwischen den ebenen, senkrecht zur Pumpenkolbenbüchsenachse liegenden Dichtflächen (13,14) besteht.

IPC 1-7

F02M 59/48

IPC 8 full level

F02M 59/48 (2006.01)

CPC (source: EP)

F02M 59/485 (2013.01)

Citation (search report)

- [AD] AT 312993 B 19740125 - FRIEDMANN & MAIER AG
- [AD] AT 338049 B 19770725 - FRIEDMANN & MAIER AG [AT]
- [A] DE 1910169 A1 19691002 - BRYCE BERGER LTD
- [A] FR 2305602 A1 19761022 - VYSOKE UCENI TECHNIKE REKTORA [CS]
- [A] GB 486378 A 19380602 - RUDOLF L ORANGE
- [A] DE 2135905 A1 19730125 - KLOECKNER HUMBOLDT DEUTZ AG
- [A] PATENT ABSTRACTS OF JAPAN, Band 7, Nr. 269 (M-259)[1414], 30. November 1983; & JP-A-58 148 268 (DIESEL KIKI K.K.) 03.09.1983

Cited by

IT201600071714A1; EP2278163A1; CN102575667A; CN111790907A; US9518546B2; WO2015052083A1; WO2011009839A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0261102 A1 19880323; EP 0261102 B1 19891011; DE 3760755 D1 19891116

DOCDB simple family (application)

EP 87890211 A 19870910; DE 3760755 T 19870910