

Title (en)

Method for manufacturing a fuel injector servo valve

Title (de)

Verfahren zur Herstellung eines Kraftstoffeinspritzservoventils

Title (fr)

Procédé de fabrication d'une servovalve d'injecteur de carburant

Publication

EP 2218904 A1 20100818 (EN)

Application

EP 09425062 A 20090216

Priority

EP 09425062 A 20090216

Abstract (en)

The manufacturing method regards a fuel injector servo valve (5), wherein a bushing (41) is designed to slide on a fixed stem for opening/closing the servo valve (5) and carries an armature (17), which is free to slide axially on the bushing (41); according to the method, the bushing is made in such a way that it has: a guide portion (61); a shoulder (62), fixed on one side of the guide portion (61) for axial resting of the armature; a flange (24) with an external diameter smaller than the internal diameter of the armature (17), for resting of a spring; an intermediate portion (71) between the flange (24) and the guide portion (61), and with an external diameter smaller than that of the flange (24); and a centring pin (12) for the spring (23). After fitting the armature (17) on the guide portion (61), causing it to pass around the flange (24), a fork (73) is slid in between the armature (17) and the flange (24) for stopping the armature (17) axially; the thickness of the fork (73) is chosen so as to leave a predefined freedom of axial movement for the armature (17) on the guide portion (61).

IPC 8 full level

F02M 61/16 (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)

F02M 61/168 (2013.01); **F02M 63/0015** (2013.01); **F02M 63/0021** (2013.01); **F02M 63/007** (2013.01); **F02M 63/0075** (2013.01); **F02M 63/008** (2013.01); **F02M 47/027** (2013.01); **F02M 51/066** (2013.01); **F02M 2200/8084** (2013.01); **F02M 2200/8092** (2013.01)

Citation (search report)

- [YA] DE 102006021741 A1 20071115 - BOSCH GMBH ROBERT [DE]
- [Y] US 5299776 A 19940405 - BRINN JR BENJAMIN F [US], et al
- [A] EP 1256709 A2 20021113 - BOSCH GMBH ROBERT [DE]
- [A] US 2009032621 A1 20090205 - RICCO MARIO [IT], et al
- [A] EP 1707798 A1 20061004 - FIAT RICERCHE [IT]

Cited by

EP3006720A4; GB2613392A; GB2613392B

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2218904 A1 20100818; **EP 2218904 B1 20110907**; AT E523687 T1 20110915

DOCDB simple family (application)

EP 09425062 A 20090216; AT 09425062 T 20090216