

Title (en)

Method of positioning an actuator of a fuel injector and apparatus to carry out the method

Title (de)

Verfahren zum Positionieren des Stellantriebs in einem Kraftstoffinjektor und Vorrichtung zur Durchfuehrung des Verfahrens

Title (fr)

Méthode de positionnement d'un actionneur d'un injecteur de carburant et dispositif pour effectuer la méthode

Publication

EP 1505295 B1 20100908 (DE)

Application

EP 04026927 A 20000504

Priority

- DE 19921242 A 19990507
- EP 00943547 A 20000504

Abstract (en)

[origin: DE19921242C1] The method involves applying a voltage to the piezo actuator (2) in the drive corresp. to a predefined idle stroke; surface grinding the actuator housing (3) and base plate (4) with the voltage applied before screwing the piezo actuator into the injector housing (1); and providing a compensation ring (9) between the injector and actuator housings, which is permanently deformed before screwing the actuator into the injector housing by a clamping device with a flat leading side until its thickness is such that a valve element (7) of a servovalve starts to open under the action of the leading side on a transfer element (5).

IPC 8 full level

F02M 61/16 (2006.01); **F02M 47/02** (2006.01); **F02M 51/06** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

F02M 47/027 (2013.01 - EP US); **F02M 61/167** (2013.01 - EP US); **F02M 61/168** (2013.01 - EP US); **F02M 63/0026** (2013.01 - EP US);
F02M 2200/701 (2013.01 - EP US); **F02M 2200/8053** (2013.01 - EP US); **F02M 2200/8069** (2013.01 - EP US);
F02M 2200/8092 (2013.01 - EP US); **Y10T 29/49412** (2015.01 - EP US); **Y10T 29/49423** (2015.01 - EP US); **Y10T 137/5987** (2015.04 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 19921242 C1 20001026; DE 50010750 D1 20050825; DE 50015988 D1 20101021; EP 1144841 A2 20011017; EP 1144841 B1 20050720;
EP 1505295 A1 20050209; EP 1505295 B1 20100908; US 2004256499 A1 20041223; US 2008011972 A1 20080117; US 6705587 B1 20040316;
US 7310986 B2 20071225; US 8720852 B2 20140513; WO 0068563 A2 20001116; WO 0068563 A3 20010719

DOCDB simple family (application)

DE 19921242 A 19990507; DE 0001408 W 20000504; DE 50010750 T 20000504; DE 50015988 T 20000504; EP 00943547 A 20000504;
EP 04026927 A 20000504; US 74318301 A 20010514; US 75859204 A 20040116; US 77840707 A 20070716