

Title (en)

FUEL INJECTION DEVICE, ESPECIALLY FOR A DIRECT INJECTION INTERNAL COMBUSTION ENGINE, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

KRAFTSTOFF-EINSPRITZVORRICHTUNG, INSBESONDERE FÜR EINE BRENNKRAFTMASCHINE MIT KRAFTSTOFF-DIREKTEINSPRITZUNG, SOWIE VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT DESTINE A UN MOTEUR A COMBUSTION INTERNE, NOTAMMENT A UN MOTEUR A COMBUSTION INTERNE A INJECTION DIRECTE, ET PROCEDE DE FABRICATION

Publication

EP 1689999 A1 20060816 (DE)

Application

EP 04786719 A 20040908

Priority

- DE 2004001997 W 20040908
- DE 10354878 A 20031124

Abstract (en)

[origin: WO2005052354A1] The invention relates to a fuel injection device (10) comprising at least two coaxial valve elements (20, 22) arranged in a housing (12). At least one fuel outlet (24, 26) is respectively associated with said valve elements. The outer valve element (20) is provided with a first sealing edge (64) oriented radially outwards in relation to the at least one fuel outlet (24) associated with the outer valve element. Said sealing edge co-operates with a valve seat (66) on the housing side and can separate the at least one fuel outlet (24) from a high pressure connection. According to the invention, the outer valve element (20) is provided with an additional sealing edge (72) between the at least one fuel outlet (24) associated with the outer valve element and the inner valve element (22).

IPC 8 full level

F02M 45/08 (2006.01); **F02M 47/02** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP US)

F02M 45/086 (2013.01 - EP US); **F02M 47/027** (2013.01 - EP US); **F02M 61/168** (2013.01 - EP US); **F02M 61/18** (2013.01 - EP US); **F02M 61/1873** (2013.01 - EP US); **F02M 61/1893** (2013.01 - EP US); **F02M 61/182** (2013.01 - EP US); **F02M 2200/16** (2013.01 - EP US); **F02M 2200/46** (2013.01 - EP US)

Citation (search report)

See references of WO 2005052354A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

DE 10354878 A1 20050609; EP 1689999 A1 20060816; US 2007108317 A1 20070517; US 7309029 B2 20071218; WO 2005052354 A1 20050609

DOCDB simple family (application)

DE 10354878 A 20031124; DE 2004001997 W 20040908; EP 04786719 A 20040908; US 57984904 A 20040908