

Title (en)
Fuel injector

Title (de)
Brennstoffeinspritzventil

Title (fr)
Injecteur de carburant

Publication
EP 1378657 B1 20100811 (DE)

Application
EP 03012487 A 20030602

Priority
DE 10230089 A 20020704

Abstract (en)
[origin: EP1378657A2] There is a hydraulic coupling device (10) between the rod moved by the actuator and the spring-loaded valve rod, with upper (11) and lower (12) pistons. There is a fluid-filled gap (34) between the pistons. There is a sealed annular membrane (35) of C-shaped cross-section between a flange (32) and the narrow top portion of the upper piston. There is a sealing sleeve (36) surrounding the lower piston and connected to a bearing sleeve (37).

IPC 8 full level
F02M 51/06 (2006.01); **F02M 61/08** (2006.01); **F02M 61/16** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)
F02M 51/0603 (2013.01); **F02M 61/08** (2013.01); **F02M 61/167** (2013.01); **F02M 2200/703** (2013.01)

Cited by
EP2199591A1; EP1452727A1; EP1450034A1; US7726625B2; US7500648B2; WO2005054725A1; WO2004076845A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1378657 A2 20040107; EP 1378657 A3 20080305; EP 1378657 B1 20100811; DE 10230089 A1 20040115; DE 50312965 D1 20100923

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