

Title (en)
Fuel injector

Title (de)
Kraftstoffeinspritzventil

Title (fr)
Injecteur de combustible

Publication
EP 2496823 A1 20120912 (EN)

Application
EP 10773109 A 20101105

Priority
• EP 09175220 A 20091106
• EP 2010066896 W 20101105
• EP 10773109 A 20101105

Abstract (en)
[origin: EP2320066A1] A solenoid actuator (200) for use in a fuel injection system is disclosed. The actuator comprises a generally cylindrical core member (202) having a longitudinal axis (A) and defining, at an end thereof, an inner pole face (210) of the actuator, a wire coil (212) disposed around the core member (202) and arranged to be connected to a power source in use so as to generate a magnetic field around the coil, an outer ring (218) arranged concentrically around the end of the core member (202) and defining an outer pole face (220) of the actuator, the outer and inner pole faces (210, 220) being substantially co-planar, and a support ring (216) of non-magnetic material having a relatively low magnetic permeability, the support ring (216) being disposed between the end of the core member (202) and the outer ring (218). In one embodiment, the actuator (200) is receivable in a recess (308) in a housing (302), and is arranged such that substantially all of the flux in a part of a magnetic circuit defined by the magnetic field is guided to pass between the outer ring (218) and the housing (302) in use of the actuator.

IPC 8 full level
F02M 63/00 (2006.01); **F02M 47/02** (2006.01); **F16K 31/06** (2006.01); **H01F 7/08** (2006.01); **H01F 7/16** (2006.01)

CPC (source: EP)
F02M 47/027 (2013.01); **F02M 63/0015** (2013.01); **F02M 63/0019** (2013.01); **H01F 7/1638** (2013.01); **F02M 2200/08** (2013.01)

Citation (search report)
See references of WO 2011054925A1

Cited by
WO2021260013A1

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2320066 A1 20110511; EP 2496823 A1 20120912; EP 2496823 B1 20141008; WO 2011054925 A1 20110512

DOCDB simple family (application)
EP 09175220 A 20091106; EP 10773109 A 20101105; EP 2010066896 W 20101105