

Title (en)
ELECTROMAGNETICALLY ACTUATABLE INLET VALVE AND HIGH-PRESSURE PUMP HAVING AN INLET VALVE

Title (de)
ELEKTROMAGNETISCH BETÄTIGBARES EINLASSVENTIL UND HOCHDRUCKPUMPE MIT EINLASSVENTIL

Title (fr)
SOUPAPE D'ADMISSION À COMMANDE ÉLECTROMAGNÉTIQUE ET POMPE HAUTE PRESSION MUNIE D'UNE SOUPAPE D'ADMISSION

Publication
EP 3387247 A1 20181017 (DE)

Application
EP 16788133 A 20161031

Priority

- DE 102015224421 A 20151207
- EP 2016076188 W 20161031

Abstract (en)
[origin: WO2017097498A1] The invention proposes an electromagnetically actuatable inlet valve (24) for a high-pressure pump, in particular of a fuel-injection system. The inlet valve (24) has a valve member (34) which can be moved between an open position and a closed position. An electromagnetic actuator (60) is provided, by means of which the valve member (34) can be moved, wherein the electromagnetic actuator (60) has an armature (68) which acts at least indirectly on the valve member (34), a magnet coil (64) which surrounds the armature (68), and a magnetic core (66) against which the armature (68) comes to rest at least indirectly when current is applied to the magnet coil (64), wherein the armature (68) is movably guided in a carrier element (78), and the carrier element (78) and the magnetic core (66) are interconnected. The carrier element (78) and the magnetic core (66) are interconnected by a sleeve-shaped connection element (90) which is integrally bonded in a first connection region (92) to the carrier element (78) and/or the magnetic core (66), and interlockingly engages the carrier element and/or the magnetic core in a second connection region (94) offset relative to the first connection region (92) in the direction of the longitudinal axis (91) of the connection element (90).

IPC 8 full level
F02M 59/36 (2006.01); **F02M 59/06** (2006.01); **F02M 59/10** (2006.01); **F02M 63/02** (2006.01); **F04B 7/00** (2006.01); **F04B 53/10** (2006.01); **F16K 31/06** (2006.01); **H01F 7/16** (2006.01)

CPC (source: EP KR US)
F02M 59/06 (2013.01 - KR); **F02M 59/102** (2013.01 - KR); **F02M 59/366** (2013.01 - EP KR US); **F02M 63/0265** (2013.01 - KR); **F04B 1/0452** (2013.01 - EP KR US); **F04B 7/0076** (2013.01 - EP KR US); **F04B 53/102** (2013.01 - EP KR US); **F04B 53/1082** (2013.01 - EP KR US); **H01F 7/1607** (2013.01 - EP KR US); **F02M 59/06** (2013.01 - EP US); **F02M 59/102** (2013.01 - EP US); **F02M 63/0265** (2013.01 - EP US); **F02M 2200/8053** (2013.01 - EP KR US); **F02M 2200/8084** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2017097498A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102015224421 A1 20170608; CN 108368810 A 20180803; CN 108368810 B 20201103; EP 3387247 A1 20181017; EP 3387247 B1 20210505; KR 20180091027 A 20180814; US 10851750 B2 20201201; US 2018355830 A1 20181213; WO 2017097498 A1 20170615

DOCDB simple family (application)
DE 102015224421 A 20151207; CN 201680071587 A 20161031; EP 16788133 A 20161031; EP 2016076188 W 20161031; KR 20187018769 A 20161031; US 201616060293 A 20161031