

Title (en)
ELECTROMAGNETICALLY OPERATED VALVE

Title (de)
ELEKTROMAGNETISCH BETÄTIGBARES VENTIL

Title (fr)
SOUPAPE A COMMANDE ELECTROMAGNETIQUE

Publication
EP 0937201 A1 19990825 (DE)

Application
EP 98945005 A 19980717

Priority
• DE 9802003 W 19980717
• DE 19739850 A 19970911

Abstract (en)
[origin: DE19739850A1] The inventive electromagnetically operated valve is characterised in that an axially moveable valve needle (6) consisting of an armature (12), a valve closing body (13) and a connecting part (14) connecting these two parts is provided. The tubular connecting part (14) has a longitudinal slit (51) whose opening width is narrower at the end (56) facing towards the valve closing body (13) than across the rest of its axial extension due to flaring in the original sheet part. The valve closing body (13) can therefore be securely fixed with a weld (16) to the lower end (56) of the connecting part (14) without disadvantageous sink points appearing. The inventive valve is particularly suitable for use in fuel injection systems of mixture compression spark ignition internal combustion engines.

IPC 1-7
F02M 51/06

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

CPC (source: EP KR US)
F02M 51/0682 (2013.01 - EP KR US); **F02M 61/168** (2013.01 - EP KR US)

Citation (search report)
See references of WO 9913212A1

Designated contracting state (EPC)
CH DE FR GB IT LI

DOCDB simple family (publication)
DE 19739850 A1 19990318; BR 9806168 A 19991019; CN 1091218 C 20020918; CN 1239535 A 19991222; DE 59804720 D1 20020814; EP 0937201 A1 19990825; EP 0937201 B1 20020710; JP 2001504917 A 20010410; JP 3998729 B2 20071031; KR 100573185 B1 20060424; KR 20000068946 A 20001125; US 6089475 A 20000718; WO 9913212 A1 19990318

DOCDB simple family (application)
DE 19739850 A 19970911; BR 9806168 A 19980717; CN 98801327 A 19980717; DE 59804720 T 19980717; DE 9802003 W 19980717; EP 98945005 A 19980717; JP 51489899 A 19980717; KR 19997004130 A 19990510; US 29795799 A 19990708