

Title (en)
FUEL-INJECTION VALVE

Title (de)
BRENNSTOFFEINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT

Publication
EP 1346147 A1 20030924 (DE)

Application
EP 01995612 A 20011215

Priority
• DE 0104747 W 20011215
• DE 10063260 A 20001219

Abstract (en)
[origin: WO0250426A1] The invention relates to a fuel-injection valve (1), in particular for fuel-injection systems of internal combustion engines. Said valve comprises an actuator (27), a valve needle (3), operated by said actuator (27), for actuating a valve closing body (4), which forms a seal seat with a valve seat surface (6) and a swirl device (15), which has at least one swirl channel (18) that is traversed by fuel with a tangential component in relation to a longitudinal axis (26) of the fuel-injection valve (1). The axial position of a bypass disc (17) that interacts with a valve needle (3) determines a cross-section of at least one bypass channel (19), which bypasses the swirl channel(s) (18) without a tangential component.

IPC 1-7
F02M 61/16; **F02M 61/12**; **F02M 51/06**

IPC 8 full level
F02M 51/08 (2006.01); **F02M 51/06** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP US)
F02M 51/0671 (2013.01 - EP US); **F02M 61/162** (2013.01 - EP US); **F02M 61/18** (2013.01 - EP US)

Citation (search report)
See references of WO 0250426A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 0250426 A1 20020627; DE 10063260 A1 20020711; DE 10063260 B4 20071129; EP 1346147 A1 20030924; JP 2004516408 A 20040603; US 2003155439 A1 20030821; US 6857585 B2 20050222

DOCDB simple family (application)
DE 0104747 W 20011215; DE 10063260 A 20001219; EP 01995612 A 20011215; JP 2002551287 A 20011215; US 20461303 A 20030324