

Title (en)  
FUEL INJECTION VALVE

Title (de)  
BRENNSTOFFEINSPRITZVENTIL

Title (fr)  
SOUPAPE D'INJECTION DE CARBURANT

Publication  
**EP 1339971 A1 20030903 (DE)**

Application  
**EP 01997637 A 20011120**

Priority  
• DE 0104298 W 20011120  
• DE 10057631 A 20001121

Abstract (en)  
[origin: DE10057631A1] The fuel injection valve (1) comprises a first valve pin (3) that stands in working connection with a first valve lock body (4). The first valve lock body operates with a first valve seat surface (5) in a valve seat body (6) together with a seal seat (7). The fuel injection valve has, downstream of the seal seat, an inject-out opening (8). Upstream of the seal seat, in the supply of the fuel, is a twist element (28) that has a twist channel (34) and a control twist channel (30) and which sits in a twist chamber (35). There is a second valve pin (20) that covers over the control supply opening (29) to the control twist channels. The second valve pin may be built as a hollow pin (21) and enclose, coaxially, the first valve pin.

IPC 8 full level  
**F02M 45/08** (2006.01); **F02M 51/06** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP)  
**F02M 51/0617** (2013.01); **F02M 51/0625** (2013.01); **F02M 51/0653** (2013.01); **F02M 61/162** (2013.01)

Citation (search report)  
See references of WO 0242635A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**DE 10057631 A1 20020523**; CZ 20022964 A3 20040714; DE 50102296 D1 20040617; EP 1339971 A1 20030903; EP 1339971 B1 20040512; ES 2220833 T3 20041216; WO 0242635 A1 20020530

DOCDB simple family (application)  
**DE 10057631 A 20001121**; CZ 20022964 A 20011120; DE 0104298 W 20011120; DE 50102296 T 20011120; EP 01997637 A 20011120; ES 01997637 T 20011120