

Title (en)  
INJECTOR FOR INJECTING FUEL

Title (de)  
INJEKTOR ZUM EINSPRITZEN VON KRAFTSTOFF

Title (fr)  
INJECTEUR D'INJECTION DE CARBURANT

Publication  
**EP 2079922 B1 20101208 (DE)**

Application  
**EP 07788444 A 20070815**

Priority  
• EP 2007058470 W 20070815  
• DE 102006049050 A 20061018

Abstract (en)  
[origin: WO2008046679A1] The invention relates to an injector for injecting fuel into a combustion chamber (3) of an internal combustion engine, having an injector housing (9) in which is held a control valve (5) for activating an injection valve element (7) which opens or closes off at least one injection opening (11), wherein the control valve (5) comprises a valve piston (39), by means of which a connection from a control space (25) into a fuel return line (27) can be opened or closed off. The valve piston (39) comprises an annular seat face (41) which can be placed into a seat (43). A shoulder (55; 93) is formed on the valve piston (39), which shoulder (55; 93) is arranged on the high-pressure side of the valve piston (39) in such a way that the pressure force exerted by the fuel on the shoulder (55; 93) assists the closing movement of the valve piston (39).

IPC 8 full level  
**F02M 47/02** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02M 47/027** (2013.01); **F02M 63/0015** (2013.01); **F02M 63/0073** (2013.01); **F02M 63/008** (2013.01); **F02M 2200/304** (2013.01); **F02M 2547/003** (2013.01)

Cited by  
EP3951160A1; EP2134956A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2008046679 A1 20080424**; AT E491091 T1 20101215; CN 101529078 A 20090909; CN 101529078 B 20120718; DE 102006049050 A1 20080430; DE 502007005914 D1 20110120; EP 2079922 A1 20090722; EP 2079922 B1 20101208

DOCDB simple family (application)  
**EP 2007058470 W 20070815**; AT 07788444 T 20070815; CN 200780038842 A 20070815; DE 102006049050 A 20061018; DE 502007005914 T 20070815; EP 07788444 A 20070815