

Title (en)  
FUEL INJECTION SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Title (de)  
KRAFTSTOFF-EINSPRITZSYSTEM FÜR EINE BRENNKRAFTMASCHINE

Title (fr)  
SYSTEME D'INJECTION DE CARBURANT POUR UN MOTEUR A COMBUSTION INTERNE

Publication  
**EP 1920156 B1 20110622 (DE)**

Application  
**EP 06776523 A 20060731**

Priority  
• EP 2006007560 W 20060731  
• DE 102005036780 A 20050802

Abstract (en)  
[origin: WO2007014733A1] The invention provides a fuel injection system which, with a mechanically simple design and low control expenditure, has a high degree of operational reliability in that a quantity-limiting arrangement, having a quantity-limiting valve and a bypass valve, is arranged upstream of a respective injector, the blocking element of which bypass valve is acted on in the closing direction with a closing force corresponding to the given pressure difference across the quantity-limiting valve, and is to be adjusted in the opening direction by means of an adjustment device whose adjustment force is lower than the closing force which corresponds to the pressure difference generated across the quantity-limiting valve if the injection valve is defective, that is to say in the event of the fuel supply to the respective cylinder combustion space exceeding the maximum control injection quantity.

IPC 8 full level  
**F02M 55/02** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP KR)  
**F02M 55/02** (2013.01 - EP KR); **F02M 55/025** (2013.01 - EP); **F02M 63/02** (2013.01 - KR); **F02M 63/0215** (2013.01 - EP);  
**F02M 63/0225** (2013.01 - EP)

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 NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 102005036780 A1 20070208**; AT E454550 T1 20100115; AT E513987 T1 20110715; DE 502006005872 D1 20100225;  
EP 1920155 A1 20080514; EP 1920155 B1 20100106; EP 1920156 A1 20080514; EP 1920156 B1 20110622; JP 2009503348 A 20090129;  
JP 2009503349 A 20090129; JP 4869346 B2 20120208; JP 5122455 B2 20130116; KR 101231701 B1 20130208; KR 101358851 B1 20140205;  
KR 20080043803 A 20080519; KR 20080045689 A 20080523; WO 2007014733 A1 20070208; WO 2007014734 A1 20070208

DOCDB simple family (application)  
**DE 102005036780 A 20050802**; AT 06776522 T 20060731; AT 06776523 T 20060731; DE 502006005872 T 20060731;  
EP 06776522 A 20060731; EP 06776523 A 20060731; EP 2006007559 W 20060731; EP 2006007560 W 20060731; JP 2008524416 A 20060731;  
JP 2008524417 A 20060731; KR 20087005101 A 20060731; KR 20087005103 A 20060731