

Title (en)  
Safety valve for fuel injection apparatus.

Title (de)  
Sicherheitsventil für eine Kraftstoff Einspritzvorrichtung.

Title (fr)  
Soupape de sécurité pour dispositif d'injection de combustible.

Publication  
**EP 0466081 A1 19920115 (EN)**

Application  
**EP 91111358 A 19910708**

Priority  
JP 18241090 A 19900709

Abstract (en)  
A safety valve (3) provided in a fuel injection apparatus including an accumulator (1) in which fuel is accumulated, comprises: a housing (30) having an inside passage (31) for introducing the high-pressure fuel of the accumulator (1) into the inside of the housing (30) and a seat face (32) formed at a portion of the inside passage (31); a valve element (36) provided movably within the housing (30) and including a valve body (37) to open/close the seat face (32); an elastic member (38) for pressing and biasing the valve element (36) in a closing direction; and a fuel chamber (39) defined between the inner surface of the housing (30) and the valve element (36) so as to maintain a pressure for pressing the valve element (36) in a valve-opening direction, wherein the high-pressure fuel from the inside passage (31) is introduced into the fuel chamber (39) when the valve body (37) of the valve element (36) is separated from the seat face (32). With this safety valve (3), the high-pressure fuel of the accumulator (1) is introduced into the fuel chamber (39) in order to press the valve element (36) in the valve-opening direction so that the valve element (36) will be rapidly opened, with the result that the fuel pressure in the accumulator (1) can recover a predetermined value instantaneously. <IMAGE>

IPC 1-7  
**F02M 59/46; F02M 63/00**

IPC 8 full level  
**F02M 47/00** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01); **F16K 15/04** (2006.01)

CPC (source: EP)  
**F02M 63/005** (2013.01); **F02M 63/0056** (2013.01)

Citation (search report)

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Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0466081 A1 19920115**; JP H0472454 A 19920306

DOCDB simple family (application)  
**EP 91111358 A 19910708**; JP 18241090 A 19900709