

Title (en)

DEVICE FOR ATTENUATING THE STROKE OF THE NEEDLE IN PRESSURE-CONTROLLED FUEL INJECTORS

Title (de)

EINRICHTUNG ZUR NADELHUBDÄMPFUNG AN DRUCKGESTEUERTEN KRAFTSTOFFINJEKTOREN

Title (fr)

DISPOSITIF PERMETTANT D'AMORTIR LA COURSE DE L'AIGUILLE SUR DES INJECTEURS DE CARBURANT COMMANDES PAR PRESSION

Publication

EP 1520100 B1 20060726 (DE)

Application

EP 03720255 A 20030403

Priority

- DE 0301101 W 20030403
- DE 10229415 A 20020629

Abstract (en)

[origin: WO2004003377A1] The invention relates to a device for injecting fuel into a combustion chamber (7) of an internal combustion engine. Said device comprises a fuel injector (1) which can be supplied with fuel under high pressure by means of a high pressure source (2), and can be actuated by means of a metering valve (6). An attenuation element (29) which defines an attenuation chamber (28) and can be displaced independently of the injection valve member (35) is associated with said injection valve member (35). Said attenuation element (29) comprises at least one overflow channel (30, 45) for connecting the attenuation chamber (28) to another hydraulic chamber (23).

IPC 8 full level

F02M 45/00 (2006.01); **F02M 47/00** (2006.01); **F02M 47/02** (2006.01); **F02M 57/02** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01); **F02M 61/20** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

F02M 47/027 (2013.01 - EP US); **F02M 57/025** (2013.01 - EP US); **F02M 57/026** (2013.01 - EP US); **F02M 61/205** (2013.01 - EP US); **F02M 2200/304** (2013.01 - EP US)

Cited by

US2023007936A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 2004003377 A1 20040108; DE 10229415 A1 20040129; DE 50304372 D1 20060907; EP 1520100 A1 20050406; EP 1520100 B1 20060726; JP 2005531715 A 20051020; JP 4295211 B2 20090715; US 2006163378 A1 20060727; US 7273185 B2 20070925

DOCDB simple family (application)

DE 0301101 W 20030403; DE 10229415 A 20020629; DE 50304372 T 20030403; EP 03720255 A 20030403; JP 2004516441 A 20030403; US 51268804 A 20041027