

Title (en)  
High-pressure fuel supply pump

Title (de)  
Hochdruckbrennstoffförderpumpe

Title (fr)  
Pompe d'alimentation en carburant haute pression

Publication  
**EP 1898084 A1 20080312 (EN)**

Application  
**EP 07015699 A 20070809**

Priority  
JP 2006235866 A 20060831

Abstract (en)  
A high-pressure fuel supply pump having a fuel relief path for connecting a high-pressure fuel path downstream of a discharge valve (8) for discharging fuel pressurized in a pressurizing chamber (11) to a low-pressure fuel path upstream of an inlet valve (30) or the pressurizing chamber, a check valve being provided in the fuel relief path as a relief valve for allowing the fuel to flow only to the low-pressure fuel path or the pressurizing chamber (11), wherein an energy attenuating mechanism is provided in a discharge path on a side facing the discharge valve (8) upstream of the relief valve in the fuel relief path so as to prevent an instantaneous pressure rise caused in the discharge path from propagating to the relief valve.

IPC 8 full level  
**F02M 55/04** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP US)  
**F02M 55/04** (2013.01 - EP US); **F02M 59/367** (2013.01 - EP US); **F02M 59/462** (2013.01 - EP US); **F02M 63/005** (2013.01 - EP US); **F02M 63/0054** (2013.01 - EP US); **F02M 63/0056** (2013.01 - EP US); **F02M 63/0245** (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US)

Citation (applicant)  
• JP 2003343395 A 20031203 - HITACHI LTD, et al  
• EP 1365142 A2 20031126 - HITACHI LTD [JP], et al

Citation (search report)  
• [DX] EP 1365142 A2 20031126 - HITACHI LTD [JP], et al  
• [X] US 2003062085 A1 20030403 - ONISHI YOSHIHIKO [JP], et al  
• [X] US 6223725 B1 20010501 - ONISHI YOSHIHIKO [JP], et al  
• [X] EP 0994255 A1 20000419 - MITSUBISHI ELECTRIC CORP [JP]  
• [X] DE 19957591 A1 20001012 - MITSUBISHI ELECTRIC CORP [JP]

Cited by  
EP2256334A1; ITBO20090197A1; EP3228859A1; EP2287462A1; DE102014214627A1; DE102014214627B4; EP2759694A4; EP3184795A1; EP2236809A3; ITBO20090198A1; EP3088726A4; EP3444469A1; US11047380B2; US8430081B2; EP2497939A1; EP3002446A1; WO2015164256A1; WO2014198442A1; WO2010060834A1; WO2015010856A1; WO2012089511A1; US9828958B2; US10788004B2; US10267278B2; WO2010072493A1; WO2017157554A1; US9556836B2; US10145348B2

Designated contracting state (EPC)  
DE FR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1898084 A1 20080312**; **EP 1898084 B1 20130109**; CN 101135283 A 20080305; CN 101135283 B 20100616; EP 2336545 A1 20110622; EP 2336545 B1 20130731; JP 2008057451 A 20080313; US 2008056914 A1 20080306

DOCDB simple family (application)  
**EP 07015699 A 20070809**; CN 200710139902 A 20070803; EP 10185169 A 20070809; JP 2006235866 A 20060831; US 83554407 A 20070808