

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

Title (de)
SPEICHEREINSPRITZSYSTEM FÜR BRENNKRAFTMASCHINE

Title (fr)
SYSTEME D'INJECTION D'ACCUMULATEUR POUR MOTEUR A COMBUSTION INTERNE

Publication
EP 1904741 B1 20101117 (DE)

Application
EP 06752914 A 20060710

Priority

- CH 2006000364 W 20060710
- CH 11952005 A 20050718
- CH 13652005 A 20050819

Abstract (en)
[origin: WO2007009279A1] Disclosed is a high-pressure accumulator injection system (10) for an internal combustion engine, preferably a diesel engine. Said injection system (10) comprises a number of injection valves (18) which are connected to a high-pressure conveying device (12) via fuel pipes (16, 14). A reservoir (22) and a check valve encompassing a bypass throttle (24) that is connected in parallel are assigned to each injection valve (18). Said check valve which is assigned to each injection valve (18) and encompasses a bypass throttle (24) that is connected in parallel allows the accumulator injection system (10) to perform stable and reproducible injection processes with a favorable pressure curve during each injection process even when the discrete reservoirs (22) are provided with an unusually low volume. The reservoirs (22) can be integrated in the housing of the injection valves (18). The inventive injection system dispenses with the need for a complex common rail.

IPC 8 full level
F02M 63/02 (2006.01); **F02M 47/02** (2006.01); **F02M 55/02** (2006.01); **F02M 55/04** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)
F02M 47/027 (2013.01 - EP US); **F02M 55/025** (2013.01 - EP US); **F02M 55/04** (2013.01 - EP US); **F02M 63/001** (2013.01 - EP US); **F02M 63/0215** (2013.01 - EP US); **F02M 63/0225** (2013.01 - EP US); **F02M 2200/40** (2013.01 - EP US)

Cited by
US2021231087A1; US11542902B2

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)
WO 2007009279 A1 20070125; AT E488690 T1 20101215; BR PI0613413 A2 20110111; BR PI0613413 B1 20190827; CN 101223352 A 20080716; CN 101223352 B 20101208; DE 502006008343 D1 20101230; EP 1904741 A1 20080402; EP 1904741 B1 20101117; JP 2009501863 A 20090122; JP 5120655 B2 20130116; US 2008296413 A1 20081204; US 7603984 B2 20091020

DOCDB simple family (application)
CH 2006000364 W 20060710; AT 06752914 T 20060710; BR PI0613413 A 20060710; CN 200680026200 A 20060710; DE 502006008343 T 20060710; EP 06752914 A 20060710; JP 2008521767 A 20060710; US 99519306 A 20060710