

Title (en)

Relief valve, high pressure pump and fuel injection system

Title (de)

Entlastungsventil, Hochdruckpumpe und Brennstoffeinspritzsystem

Title (fr)

Soupape de décharge, pompe haute pression et système d'injection de carburant

Publication

EP 2706223 A1 20140312 (EN)

Application

EP 12183506 A 20120907

Priority

EP 12183506 A 20120907

Abstract (en)

A relief valve arrangement is specified. It comprises a first valve seat (103) and a first sealing member (105). The first sealing member (105) is designed to seal the first valve seat (103) hydraulically in case of a mechanical connection between the first sealing member (105) and the first valve seat (103). It further comprises a second valve seat (106) and a second sealing member (107). The second sealing member (107) is designed to seal the second valve seat (106) hydraulically in case of a mechanical connection between the second sealing member (107) and the second valve seat (106). The relief valve arrangement also comprises a first spring (109) comprising a spring rate and being coupled to the first sealing member (105) such that the first sealing member (105) is pressed against the first valve seat (103), and a second spring (112) comprising a spring rate and being coupled to the second sealing member (107) such that the second sealing member (107) is pressed against the second valve seat (106). The value of the spring rate of the first spring (109) is greater than the value of the spring rate of the second spring (112). Further, a high pressure pump and a fuel injection system are specified.

IPC 8 full level

F02M 63/00 (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP)

F02M 63/005 (2013.01); **F04B 53/10** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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