

Title (en)
FUEL CONVEYING DEVICE

Title (de)
VORRICHTUNG ZUM FÖRDERN VON KRAFTSTOFF

Title (fr)
DISPOSITIF DE TRANSPORT DE CABURANT

Publication
EP 1941151 B1 20090121 (DE)

Application
EP 06792832 A 20060816

Priority
• EP 2006065347 W 20060816
• DE 102005049982 A 20051019

Abstract (en)
[origin: WO2007045519A1] Known devices have a valve housing in which a pressure release valve and a non-return valve are arranged parallel to one another, the pressure release valve having a first inlet, which downstream of a valve seat opens into a valve chamber in which a valve body is movably arranged and which is in fluid connection with a second inlet for the non-return valve via a first outlet. This has the disadvantage that the first outlet is arranged in the valve chamber in such a way as to result in an axial outflow from the valve chamber of the pressure release valve. Owing to the axial outflow, only a comparatively low impulse force is exerted on the valve body and thus only a comparatively small opening stroke for a given volumetric flow is executed. The control response is thus not optimum. The claimed device improves the control response of the pressure release valve. According to the invention, the first outlet (26.1) is provided at the periphery of the valve chamber (36) and is arranged in the axial direction with respect to a valve axis (38) such that when the pressure release valve (23) is open the flow from the valve chamber (36) into the second inlet (25.2) is a substantially radial flow.

IPC 8 full level
F02M 37/10 (2006.01); **F02M 37/02** (2006.01); **F02M 69/54** (2006.01)

CPC (source: EP US)
F02M 37/0023 (2013.01 - EP US); **F02M 37/0058** (2013.01 - EP US); **F02M 37/025** (2013.01 - EP US); **F02M 37/106** (2013.01 - EP US); **F02M 69/54** (2013.01 - EP US); **Y10T 137/7738** (2015.04 - EP US); **Y10T 137/7771** (2015.04 - EP US); **Y10T 137/7777** (2015.04 - EP US); **Y10T 137/7779** (2015.04 - EP US); **Y10T 137/86002** (2015.04 - EP US); **Y10T 137/86019** (2015.04 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
DE 102005049982 A1 20070426; DE 502006002735 D1 20090312; EP 1941151 A1 20080709; EP 1941151 B1 20090121; US 2008251052 A1 20081016; US 8066030 B2 20111129; WO 2007045519 A1 20070426

DOCDB simple family (application)
DE 102005049982 A 20051019; DE 502006002735 T 20060816; EP 06792832 A 20060816; EP 2006065347 W 20060816; US 8828706 A 20060816