

Title (en)

VALVE FOR THE METERED SUPPLY OF VAPORISED FUEL TO AN INLET PIPE OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VENTIL ZUM DOSIERTEN EINLEITEN VON VERFLÜCHTIGTEM BRENNSTOFF IN EINEN ANSAUGKANAL EINER BRENNKRAFTMASCHINE

Title (fr)

SOUPAPE POUR L'INJECTION DE DOSES DE CARBURANT VAPORISE DANS UNE CONDUITE D'ADMISSION D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 0628137 B1 19970319 (DE)

Application

EP 94900748 A 19931203

Priority

- DE 4244113 A 19921224
- DE 9301151 W 19931203

Abstract (en)

[origin: WO9415091A1] In a prior art tank venting valve, especially with pulsed control of an electromagnet adjusting the position of the tank venting valve, undesirable operating noises can arise owing to contact between relatively moving metal components, and this is to be prevented. The valve closer (37) has at least one damper (35) which axially completely passes through the valve closer (37) and forms a first damping surface (40) directed towards the valve seat (27) on the first face (38) of the valve closer (37) and a second damping surface (41) directed towards the electromagnet (13) on the second face (39) of the valve closer (37) so as to prevent or damp any impact of the valve close (37) on the valve seat (27) or on the magnet core (15). The tank venting valve of the invention is suitable for the metered supply of vaporised fuel from the fuel tank of a compressed-mixture, spark ignition internal combustion engine to one of its inlet pipes.

IPC 1-7

F02M 25/08

IPC 8 full level

F02M 25/08 (2006.01)

CPC (source: EP KR US)

F02M 25/0836 (2013.01 - EP US); **F02M 29/00** (2013.01 - KR); **F02M 2025/0845** (2013.01 - EP US)

Citation (examination)

- US 5178116 A 19930112 - FEHRENBACH SIEGFRIED [DE], et al
- DE 4023044 A1 19920123 - BOSCH GMBH ROBERT [DE]
- JP H02209683 A 19900821 - MITSUBISHI ELECTRIC CORP
- EP 0585527 A1 19940309 - FREUDENBERG CARL FA [DE]

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 4244113 A1 19940630; DE 59305883 D1 19970424; EP 0628137 A1 19941214; EP 0628137 B1 19970319; EP 0628137 B2 20020828; ES 2100033 T3 19970601; ES 2100033 T5 20030316; JP 3597192 B2 20041202; JP H07504259 A 19950511; KR 100301333 B1 20011215; KR 950700488 A 19950116; US 5560585 A 19961001; WO 9415091 A1 19940707

DOCDB simple family (application)

DE 4244113 A 19921224; DE 59305883 T 19931203; DE 9301151 W 19931203; EP 94900748 A 19931203; ES 94900748 T 19931203; JP 51466294 A 19931203; KR 19940702830 A 19940817; US 29071094 A 19940812