

Title (en)

A FUEL FLOW LIMITING VALVE FOR LARGE INTERNAL COMBUSTION ENGINES

Title (de)

BRENNSTOFFDURCHFLUSSBEGRENZUNGSVENTIL FÜR GROSSE VERBRENNUNGSMOTOREN

Title (fr)

SOUPAPE DE LIMITATION DE DÉBIT DE CARBURANT POUR MOTEURS À COMBUSTION INTERNE DE GRANDE TAILLE

Publication

EP 3023628 A1 20160525 (EN)

Application

EP 15192931 A 20151104

Priority

IT TO20140961 A 20141121

Abstract (en)

A fuel flow limiting valve for large internal combustion engines, comprising: - a valve housing (12) including an inner cylindrical surface (24) surrounding a valve chamber (14), an inlet channel (28) with an inlet valve seat (30), an outlet channel (38) with an outlet valve seat (40), - a valve piston (42) housed in said valve chamber (14) and having a base wall (44) and a cylindrical wall (46), which is guided in a longitudinal direction (A) from said inner cylindrical surface (24) of the valve housing (12), the valve piston (42) having a first sealing surface (52) cooperating with the inlet valve seat (30) and a second sealing surface (54) cooperating with the outlet valve seat (40), the valve piston (42) being movable in said longitudinal direction (A) between a first position in which the first sealing surface (52) closes the inlet valve seat (30) and a second position in which the second sealing surface (54) closes the outlet valve seat (40), and - an elastic element (58) arranged between the housing (12) and the valve piston (42) and tending to push the valve piston (42) towards said first position, wherein the first and the second sealing surfaces (52, 54) are machined directly onto said base wall (44) of the valve piston (42) and wherein the valve housing (12) comprises a pin formation (34), which extends in the longitudinal direction within said valve chamber (14).

IPC 8 full level

F02M 63/00 (2006.01); **F02M 55/02** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP)

F02M 63/0033 (2013.01); **F02M 63/0054** (2013.01); **F02M 63/0075** (2013.01); **F02M 63/0215** (2013.01); **F02M 55/02** (2013.01); **F02M 63/0225** (2013.01)

Citation (applicant)

- US 3780716 A 19731225 - FENNE I
- EP 2423498 A1 20120229 - WAERTSILAE SCHWEIZ AG [CH]

Citation (search report)

- [AD] EP 2423498 A1 20120229 - WAERTSILAE SCHWEIZ AG [CH]
- [A] EP 1270931 A2 20030102 - WAERTSILAE TECH OY AB [FI]
- [A] DE 4344190 A1 19950629 - ORANGE GMBH [DE]

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)

EP 3023628 A1 20160525; **EP 3023628 B1 20170308**; **EP 3023628 B8 20170419**; CN 105626341 A 20160601; CN 105626341 B 20181214; DK 3023628 T3 20170501; KR 101800936 B1 20171123; KR 20160061252 A 20160531

DOCDB simple family (application)

EP 15192931 A 20151104; CN 201510800410 A 20151119; DK 15192931 T 20151104; KR 20150154170 A 20151104