

Title (en)

A valve unit for regulating the flow-rate of a fuel gas

Title (de)

Ventileinheit zur Regelung des Durchflusses von Brenngas

Title (fr)

Unité de soupape pour commander le débit d'un gaz de combustible

Publication

EP 1039225 A2 20000927 (EN)

Application

EP 99202114 A 19990629

Priority

IT PD990058 A 19990323

Abstract (en)

A valve unit for regulating the flow-rate of a fuel gas delivered through a delivery duct (3) is described and comprises a servo-valve (4) having a closure element (5) controlled by a diaphragm (8), the diaphragm being subjected to the gas-delivery pressure on one side and to a reference pressure established in a control chamber (9) of the servo-valve on the other side, a pressure-regulator device associated with the servo-valve (4) and comprising a regulation valve (10; 51) for controlling the reference pressure in the control chamber (9), additional regulator means for modulating the delivery pressure and/or the output flow-rate of gas through the delivery duct (3) in dependence on an external control, the additional regulator means acting alternatively on the pressure-regulator device or on means (53) for choking the delivery duct in order to modulate the delivery pressure, or to modulate the flow-rate delivered through the delivery duct (3), respectively, and actuator means for the additional regulator means, comprising a reversible motor (32) having a rotor (31) connected to a male-and-female screw coupling (28, 29; 58, 57) acting on the pressure-regulator device or on the choking means, for the operative control thereof. <IMAGE>

IPC 1-7

F23N 5/10; **F23N 1/00**

IPC 8 full level

F23N 1/00 (2006.01); **F23N 5/10** (2006.01)

CPC (source: EP)

F23N 1/007 (2013.01); **F23N 5/102** (2013.01); **F23N 2235/16** (2020.01); **F23N 2235/20** (2020.01)

Cited by

EP2327931A3; CN108644412A; US6941962B2; US6938634B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 1039225 A2 20000927; **EP 1039225 A3 20020508**; DE 1039225 T1 20010607; ES 2151874 T1 20010116; IT 1308112 B1 20011129; IT PD990058 A1 20000923

DOCDB simple family (application)

EP 99202114 A 19990629; DE 99202114 T 19990629; ES 99202114 T 19990629; IT PD990058 A 19990323