

Title (en)
DEVICE FOR CONTROLLING A GAS EXCHANGE VALVE

Title (de)
VORRICHTUNG ZUR STEUERUNG EINES GASWECHSELVENTILS

Title (fr)
DISPOSITIF DE COMMANDE DE SOUPAPES DE TRANSFERT DE GAZ

Publication
EP 1485585 A1 20041215 (DE)

Application
EP 03704223 A 20030117

Priority
• DE 0300121 W 20030117
• DE 10210334 A 20020308

Abstract (en)
[origin: WO03076772A1] Disclosed is a device for controlling gas exchange valves comprising at least one valve actuator (16) and a pressure supply device (25) which provides the valve actuator (16) with high-pressure fluid. The valve actuator (16) comprises a working cylinder (17) with an actuating piston (21) which is coupled to the gas exchange valve (10) and which defines an upper pressure chamber (22) for closing the valve and a lower chamber (23) for opening the valve, in addition to a control valve (19) which controls the hydraulic pressure in the pressure chambers (22, 23). In order to reduce the production costs and electrical power requirements of said device, the upper pressure chamber (22) is connected directly and the lower pressure chamber (23) is connected by means of a throttle (18) to the pressure supply device (25) and the control valve (19) is connected to the lower pressure chamber (23) and a discharge line (27). According to the switching position, the control device (19) also connects the lower pressure chamber (23) to the discharge line (27) or blocks it off from said discharge line.

IPC 1-7
F01L 9/02

IPC 8 full level
F01L 9/02 (2006.01); **F01L 9/10** (2021.01)

CPC (source: EP US)
F01L 9/10 (2021.01 - EP US); **F01L 2001/34446** (2013.01 - EP US)

Citation (search report)
See references of WO 03076772A1

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
WO 03076772 A1 20030918; DE 10210334 A1 20030918; DE 50309104 D1 20080320; EP 1485585 A1 20041215; EP 1485585 B1 20080130; JP 2005519225 A 20050630; JP 4290563 B2 20090708; US 2004089829 A1 20040513; US 6857618 B2 20050222

DOCDB simple family (application)
DE 0300121 W 20030117; DE 10210334 A 20020308; DE 50309104 T 20030117; EP 03704223 A 20030117; JP 2003574964 A 20030117; US 47190703 A 20030915