

Title (en)

HYDRAULICALLY CONTROLLED ACTUATOR FOR ACTUATING A VALVE

Title (de)

HYDRAULISCH GESTEUERTER AKTUATOR ZUR BETÄTIGUNG EINES VENTILS

Title (fr)

ACTIONNEUR A COMMANDE HYDRAULIQUE POUR L'ACTIONNEMENT D'UNE SOUPAPE

Publication

EP 1427917 A1 20040616 (DE)

Application

EP 02752978 A 20020625

Priority

- DE 0202318 W 20020625
- DE 10143959 A 20010907

Abstract (en)

[origin: WO03027450A1] Disclosed is a hydraulically controlled actuator (16) for actuating a valve (10), especially a gas exchange valve (10) in a combustion cylinder (11) of an internal combustion engine, which has two fluid-filled pressure chambers (21, 22) with controllable chamber volumes and a sealable adjusting piston (18) defining the pressure chambers (21, 22) by means of opposing piston sides and acting upon the valve (10), provided with a closing active surface impinged upon by the pressure of the fluid in the pressure chambers (21, 22) in order to close said valve (10), in addition to an opening active surface which is impinged upon by fluid pressure so that the valve (10) can be opened. In order to influence the kinematics of the opening and closing movements of the valve (10), the adjusting piston (18) is embodied in such a way that the surface area of at least one of the two active surfaces can be modified along the displacement path of the adjusting piston (18).

IPC 1-7

F01L 9/02

IPC 8 full level

F01L 9/10 (2021.01); **F02D 13/02** (2006.01); **F15B 15/14** (2006.01)

CPC (source: EP US)

F01L 9/10 (2021.01 - EP US)

Citation (search report)

See references of WO 03027450A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 03027450 A1 20030403; DE 10143959 A1 20030327; EP 1427917 A1 20040616; JP 2005504206 A 20050210; US 2004055547 A1 20040325; US 6857403 B2 20050222

DOCDB simple family (application)

DE 0202318 W 20020625; DE 10143959 A 20010907; EP 02752978 A 20020625; JP 2003530988 A 20020625; US 41610703 A 20031009