

Title (en)

DEVICE AND METHOD FOR CONTROLLING THE LIFT OF AN OUTLET GAS EXCHANGE VALVE OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG UND VERFAHREN ZUR REGELUNG DES HUBVERLAUFES EINES AUSLASSGASWECHSELVENTILS EINER BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF ET PROCEDE POUR REGULER LA LEVEE D'UNE SOUPAPE D'ECHANGE GAZEUX D'ECHAPPEMENT D'UN MOTEUR A COMBUSTION INTERNE

Publication

**EP 1812693 B1 20091007 (DE)**

Application

**EP 05803031 A 20051019**

Priority

- EP 2005011246 W 20051019
- DE 102004054775 A 20041112

Abstract (en)

[origin: US7753015B2] A device and a method for regulating the lift characteristic of an exhaust charge cycle valve of an internal combustion engine. The device comprises a controllable electric motor having an actuator element for actuation of the exhaust charge cycle valve, a regulating device for controlling the electric motor and two energy storage means acting in opposite drive directions on the exhaust charge cycle valve. The regulating device controls the electric motor according to a stored setpoint path, on the basis of which the exhaust charge cycle valve is transferred between a first end position and a second end position by swiveling the rotor of the electric motor back and forth. At least two different setpoint paths may be provided for regulating the speed of the rotor of the electric motor, whereby a lower kinetic energy is transferred to the exhaust charge cycle valve in regulation on the basis of the one setpoint path during the valve opening process than in regulation on the basis of the other setpoint path.

IPC 8 full level

**F01L 9/20** (2021.01); **F01L 9/22** (2021.01)

CPC (source: EP US)

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