

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

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Application
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Priority
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Abstract (en)
[origin: WO2006050795A1] The invention relates to a device and method for controlling the lift of an outlet gas exchange valve of an internal combustion engine. The device comprises a controllable electric motor with an actuating element for actuating the outlet gas exchange valve, a controller device for controlling the electric motor and energy storage means acting upon the outlet gas exchange valve in two opposite drive directions. The controller device controls the electric motor according to a stored set trajectory, enabling the outlet gas exchange valve to move from a first end position into a second end position and vice versa by pivoting the rotor of the electric motor backwards and forth. According to the invention, at least two different set trajectories are provided in order to control the speed of the rotor of the electric motor so that the electric motor can be controlled. Lower kinetic energy is transferred to the outlet gas exchange valve when control is exerted by means of the set trajectory during the valve opening process than when control is exerted by means of the other set trajectory.

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