

Title (en)

DEVICE FOR VARIABLY ADJUSTING THE CONTROL TIMES OF GAS EXCHANGE VALVES OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUR VARIABLEN EINSTELLUNG DER STEUERZEITEN VON GASWECHSELVENTILEN EINER BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF POUR LE RÉGLAGE VARIABLE DES TEMPS DE COMMANDE DE SOUPAPES DE CHANGEMENT DE GAZ D'UN MOTEUR À COMBUSTION INTERNE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2011064094A1] The invention relates to a camshaft adjuster (11) for a camshaft (35) by which the cylinder valves (12) of a combustion engine are actuated, wherein by means of the camshaft (35) in the case of oncoming cams, late-torque has an effect on the camshaft adjuster (11) in the direction of later cylinder valve opening times and, in the case of departing cams, opposing early-torque has effect in the direction of earlier cylinder valve opening times, wherein the supply and removal of pressure means is controllable by means of a control unit (20), wherein a torque mode or a pump mode can be selectively adjusted by means of the control unit (20), wherein primarily camshaft torque is used in torque mode to build pressure in the first partial chamber A or in the second partial chamber B, whereas the pressure build-up in the first partial chamber A or in the second partial chamber B primarily occurs in pump mode by means of a pressure means provided by a pressure means pump P. According to the invention, the control unit comprises a control valve (101) and has an inner sleeve (103) and an outer sleeve (105), wherein the desired adjustment direction and the pump or torque mode can be adjusted by means of the control valve (101) and an adaptation to the occurring camshaft torque can be adjusted by means of the relative rotational position of the inner sleeve (103) to the outer sleeve (105).

IPC 8 full level

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