

Title (en)

VALVE PHASING DEVICE FOR INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUR VARIABLEN EINSTELLUNG DER STEUERZEITEN VON GASWECHSELVENTILEN EINER BRENNKAFTMASCHINE

Title (fr)

DISPOSITIF DE DEPHASAGE DE SOUPAPES POUR MOTEUR A COMBUSTION INTERNE

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Application

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Abstract (en)

[origin: WO2011064228A1] The invention relates to a camshaft adjuster (11) for a camshaft (35), by means of which cylinder valves (12) of an internal combustion engine are actuated, wherein by means of the camshaft (35) late torques act on the camshaft adjuster (11) in the direction of later cylinder valve opening times when the cam is rising, and opposing early torques act on the camshaft adjuster (11) in the direction of earlier opening times when the cam is falling, wherein the feeding and draining of pressure medium can be controlled 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 torques are used for building up pressure in the first partial chamber A or in the second partial chamber B in the torque mode, while the pressure build-up in the first partial chamber A or in the second partial chamber B in the pump mode is primarily brought about by means of a pressure medium provided by a pressure medium pump P. The control unit thereby comprises a control valve (101) and a rotary transfer device (103), wherein the desired adjusting direction and the pump or torque mode can be adjusted by means of the control valve (101) and the adaptation to the occurring camshaft torques can be adjusted by means of the rotary transfer device (103).

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