

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 DESTINÉ À RÉGLER DE MANIÈRE VARIABLE LES TEMPS DE COMMANDE DES SOUPAPES D'ÉCHANGES DES GAZ D'UN MOTEUR À COMBUSTION INTERNE

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Application

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Abstract (en)

[origin: WO2008006684A1] The invention relates to a device (10) for variably adjusting control times of gas exchange valves (9a, 9b) of an internal combustion engine (1), comprising an external rotor (22) and an internal rotor (23) that is arranged such that it can rotate in relation to the external rotor. One of the components is drivingly connected to the crank shaft (2) and the other component is drivingly connected to the camshaft (6, 7). At least one pressure chamber (33) is provided and each pressure chamber (33) is divided into two counter-working pressure chambers (35, 36). One of the pressure chambers (35, 36) of each pressure chamber (33) acts as an advance chamber and the other pressure chamber (35, 36) as a trailing chamber. At least two rotation angle limiting devices (42, 43) are provided, each of said rotation angle limiting devices (42, 43) being able to assume an unlocked state and locked state. The locked state can be adjusted by supplying or withdrawing a pressure medium to and from the respective rotation angle limiting devices (42, 43).

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