

Title (en)
DEVICE FOR THE VARIABLE ACTUATION OF THE GAS EXCHANGE VALVES OF INTERNAL COMBUSTION ENGINES, AND METHOD FOR OPERATING ONE SUCH DEVICE

Title (de)
VORRICHTUNG ZUR VARIABLEN BETÄTIGUNG DER GASWECHSELVENTILE VON VERBRENNUNGSMOTOREN UND VERFAHREN ZUM BETREIBEN EINER DERARTIGEN VORRICHTUNG

Title (fr)
DISPOSITIF DE COMMANDE VARIABLE DE SOUPAPES D'ECHANGE DES GAZ POUR MOTEURS A COMBUSTION INTERNE ET PROCEDE DE FONCTIONNEMENT D'UN DISPOSITIF DE CE TYPE

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Abstract (en)
[origin: WO2004085804A1] The invention relates to a device for the variable actuation of gas exchange valves for internal combustion engines, wherein at least one cam (2) pertaining to a camshaft (1) mounted in a housing rotates according to the engine speed. The cam (2) first drives an intermediate member (4) which performs a clear oscillating, rotary movement and has a rotational axis (7) that can be displaced in the housing parallel to itself along a curve of displacement (8), said intermediate member comprising a control cam (5) having a lifting region (5b) and actuating an output member (11) that, in turn, actuates at least one valve (13). The aim of the invention is to enable one such device to be reliably controlled. To this end, the control cam (5) has a catch region (5a), and the intermediate member (4) is mounted on a bearing having an axis which corresponds to the rotational axis (7), said bearing being arranged in such a way that it is guided in a forced manner and can be displaced parallel to the curve of displacement (8, 28, 35), by means of an articulation (16, 24, 26) connected to the cylinder head or the housing or by a slide (34) that is guided in the housing in a positively locking manner. The invention also relates to a method for operating an internal combustion engine comprising a plurality of cylinders using at least one of the inventive devices.

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