

Title (en)

VALVE TRAIN FOR INTERNAL COMBUSTION ENGINES FOR ACTUATING GAS EXCHANGE VALVES

Title (de)

VENTILTRIEB FÜR VERBRENNUNGSKRAFTMASCHINEN ZUR BETÄTIGUNG VON GASWECHSELVENTILEN

Title (fr)

COMMANDE POUR ACTIONNER DES SOUPAPES DE CHANGEMENT DES GAZ SUR DES MOTEURS À COMBUSTION INTERNE

Publication

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Application

EP 10760229 A 20100803

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Abstract (en)

[origin: WO2011018073A2] The invention relates to a valve train for internal combustion engines for actuating gas exchange valves which can be operated set to different opening lifts. The aim of the invention is to provide a valve train for actuating gas exchange valves of internal combustion engines, characterised by having a simple structure whilst at the same time reducing exerted frictional forces. The claimed valve train for internal combustion engines for actuating gas exchange valves consists of a camshaft driven by a crankshaft of the internal combustion engine, said camshaft consisting of several individual cam sleeves which can be displaced axially against each other. The individual cam sleeves which be displaced separately against each other are connected via an axially extending toothing, said toothing of the respective adjacent cam sleeves being embodied in an engaging manner. Several different cam profiles with similar base-circle sections are arranged on each cam sleeve, said base-circle sections can be brought into contact with the gas exchange valves by displacing the individual cam sleeves. A selector shaft (1) rotating with the cam sleeves is arranged inside the cam sleeves, said selector shaft being operatively connected to the respective cam sleeve via a selector pin. A circumferential selector contour is arranged on the inner periphery of each cam sleeve in which the driver is mounted in a sliding manner. Said selector shaft is joined to the actuator with which, during a shifting step for displacing the cam sleeves, the selector shaft undergoes a relative rotation in relation to the selector shaft.

IPC 8 full level

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