

Title (en)

METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE WITH ELECTROHYDRAULIC VALVE CONTROL MEANS

Title (de)

VERFAHREN ZUM BETRIEB EINER BRENNKRAFTMASCHINE MIT ELEKTROHYDRAULISCHER VENTILSTEUERUNG

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UN MOTEUR À COMBUSTION INTERNE À COMMANDE DE SOUPAPE ÉLECTROHYDRAULIQUE

Publication

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Application

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Abstract (en)

[origin: WO2014015869A1] The invention relates to a method for operating an internal combustion engine (4) with electrohydraulic valve control means (1) for the variable-lift drive of a gas exchange valve (3), comprising a camshaft (6) and a hydraulic system arranged in the drive path between the camshaft and the gas exchange valve, said hydraulic system being connected to a pressure medium supply (14) of the internal combustion engine, a first hydraulic piston (8) which is driven by a cam (5) of the camshaft and a second hydraulic piston (9) which drives the gas exchange valve in an opening direction, a variable-volume pressure chamber (10) which is delimited by the hydraulic piston and a control duct (12) which connects the pressure chamber to a pressure relief chamber (11), an electrically actuated hydraulic valve (15) which is arranged in the control duct and which, in an open position, permits a flow of hydraulic medium through the control duct and, in a closed position, blocks a flow of hydraulic medium through the control duct, and an electronic actuation means (16) for the actuation of the hydraulic valve as a function of operating parameters of the internal combustion engine. To improve the cold-start behaviour of the internal combustion engine, it is provided that, during the starting phase, the hydraulic valve is closed and opened again at least once between two immediately successive lifts of the first hydraulic piston.

IPC 8 full level

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