

Title (en)  
VARIABLE VALVE CONTROL COMPRISING A SLIDING-BLOCK PART AND A FREE TRAVEL

Title (de)  
VARIABLE VENTILSTEUERUNG MIT KULISSENELEMENT UND LEERWEG

Title (fr)  
COMMANDE DE SOUPAPE VARIABLE AVEC ELEMENT COULISSANT ET COURSE A VIDE

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Application  
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Abstract (en)  
[origin: WO0175279A1] The invention relates to a variable valve train for reciprocating engines, in particular internal combustion engines comprising at least one cam of a camshaft that is rotatably mounted in the cylinder head. Said cam actuates a lift valve using a pulley assembly which can be displaceably guided in a sliding-block part along an adjusting inclined plane, together with a valve actuating element which is connected in series. The valve stroke can be adjusted in a variable manner in relation to the cam by the displacement of the sliding-block part and the pulley assembly is elastically pre-tensioned in relation to the cam. To achieve a sturdy valve train which exhibits uniform valve accelerations, a free travel (s) that allows an excitation movement of the pulley assembly is provided between the cam heel and the valve actuating element. The valve actuating element is configured as a two-part cam follower with a rocker action and the sliding-block part has a sliding-block guide comprising an additional excitation inclined plane for the pulley assembly.

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