Title (en)

A FLEXIBLE CONTROL DEVICE FOR TIME-SECTION FACTOR

Title (de)

FLEXIBLE STEUERVORRICHTUNG FÜR ZEITABSCHNITTSFAKTOR

Title (fr)

DISPOSITIF DE COMMANDE SOUPLE DE FACTEUR TEMPOREL

Publication

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Application

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Abstract (en)

The present invention provides a control device for continuously variable time and cross section which is added the throttle control valve (10), the element (8) of throttle control valve and the relevant drive mechanism 1 in the regular intake and exhaust system of internal combustion engine. The throttle control valve (10) is fixed in the cavity, which is composed of the fluid flow passage (11) in the cylinder head (7), the valve seat (12) and the valve (9). The throttle control valve (10) is cylindrical, and its axis of motion is just the same as that of the valve guide or is parallel with it. Through controlling the relative movement between the valve (9) and the throttle control valve (10) it is flexible to adjust the cross-section area of fluid flow passage, effective valve phase, working time, effective lift and swirl intensity of fluid movement in the course of periodic opening and closing of valve. The present invention can apparently improve the performance of cold start-up of the engine in the low temperature, and can make the engine have the perfect economical and dynamic performance, low noise and low emission. At the same time the direct control of EGR can be easily realized with it. <IMAGE>

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IPC 8 full level

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