

Title (en)

IDLING CONTROL FOR A SPARK-IGNITED ENGINE

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Application

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Priority

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Abstract (en)

[origin: CA1232500A] An idling control for an Otto engine, whereon a positioning leg of a throttle valve being in a suction pipe is coupled with a piston rod of a pneumatic cylinder unit, the cylinder chamber of which is connectable via a valve chamber and input conduits of a three-way flow control valve, on the one hand, on the downstream side of the throttle valve with the suction pipe and, on the other hand, with the atmosphere. The technical problem of the invention is a control of the idling speed compensating load changes. The three-way flow control valve comprises a membrane-like, freely movable, ferromagnetic valve plate which cooperates with valve seats of the input conduits and is arranged between two coils opposing each other. The two coils are connected to push-pull outputs of a pulse generator with adjustable pulse duty factor. A comparing circuit compares a nominal speed signal with an actual speed signal of the Otto engine and delivers a shifting signal for the pulse duty factor to the pulse generator. The nominal speed signal is variable as a function of operating parameters.

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