Title (en)

THROTTLE PLATE DEVICE

Title (de)

DROSSELKLAPPENEINRICHTUNG

Title (fr)

DISPOSITIF DE PAPILLON DES GAZ

Publication

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Application

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Abstract (en)

[origin: WO2010081595A1] Throttle plate devices are known, having a throttle plate disposed in a through channel and a bypass channel bypassing the throttle plate, said bypass channel comprising a bypass chamber connected to the through channel upstream of the throttle place by means of a chamber input and to the through channel downstream of the throttle plate by means of a chamber outlet, and having an idle control at least partially received in the bypass chamber for controlling the bypass flow. The stepper motor is inserted through a chamber opening into the bypass chamber, and comprises an axially adjustable valve member acting together with a valve seat formed on the floor of the bypass chamber. The chamber opening is sealed closed after installing the stepper motor. It is disadvantageous that the idle control is designed as a stepper motor and is therefore relatively expensive. In the throttle valve device according to the invention, the production costs are reduced. According to the invention, the idle control (9) is designed as a separate valve comprising a valve inlet (9.1), a valve outlet (9.2), and a valve seat (9.3) disposed between the valve inlet (9.1) and the valve outlet (9.2) in the flow direction, and a valve body (9.4) acting together with the valve seat (9.3), wherein the valve outlet (9.2) protrudes into the chamber outlet (6) and the valve inlet (9.1) opens into the bypass chamber (4).

IPC 8 full level

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