

Title (en)

Bypass air volume control system for throttle body

Title (de)

Bypassluft-Mengensteuerungssystem für einen Drosselkörper

Title (fr)

Système de contrôle du volume d'air de dérivation pour corps de papillon

Publication

EP 2447512 A1 20120502 (EN)

Application

EP 11187101 A 20111028

Priority

JP 2010245343 A 20101101

Abstract (en)

A bypass air volume control system for a throttle body includes a throttle body provided with: a valve-body guide hole into which a valve body is slidably fitted and into which atmospheric air is introduced; a flat surface formed by opening one end of the valve-body guide hole; and an air control groove which is opened at an inner periphery of the valve-body guide hole in such a manner as to be opened and closed by the valve body and which is opened at the flat surface, a blocking member being fixed to the throttle body and closing an opening end of the air control groove at the flat surface. The blocking member (32) is formed in such a manner that at least a portion thereof exists inside an inner periphery of the valve-body guide hole (10) on the plane including the flat surface (29), the blocking member (32) functioning as a stopper for restricting closing movement of the valve body (27) when the valve body (27) reaches a fully closed position where the opening of the air control groove (30) at the inner periphery of the valve-body guide hole (10) is fully closed. Accordingly, it is possible to achieve reduction in production cost by reducing the processing cost and reducing the number of operation steps.

IPC 8 full level

F02D 9/10 (2006.01); **F16K 3/02** (2006.01)

CPC (source: EP)

F02D 9/1055 (2013.01); **F02D 9/1095** (2013.01)

Citation (applicant)

JP 2007132235 A 20070531 - KEIHIN CORP

Citation (search report)

- [Y] EP 1296049 A1 20030326 - KEIHIN CORP [JP]
- [Y] GB 2307718 A 19970604 - JIDOSHA KIKI CO [JP]
- [A] DE 3028898 A1 19820304 - BOSCH GMBH ROBERT [DE]
- [A] EP 1785615 A1 20070516 - KEIHIN CORP [JP]

Cited by

US10731572B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2447512 A1 20120502; EP 2447512 B1 20170823; JP 2012097650 A 20120524; JP 5675276 B2 20150225

DOCDB simple family (application)

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