

Title (en)

Integrated intake manifold / throttle valve body

Title (de)

Integrierter Einlasskrümmer / Drosselklappenstutzen

Title (fr)

Ensemble intégré collecteur d'admission/boîtier papillon

Publication

EP 0987429 B1 20040414 (FR)

Application

EP 99440243 A 19990907

Priority

FR 9811526 A 19980914

Abstract (en)

[origin: EP0987429A1] The assembly consists of an inlet manifold (1) and a throttle valve (5) and incorporates a regulating module (2) for its through section in line with the manifold air feed port. The module comprises an annular housing for the valve flap, mounted on a spindle (5') connected to a control system situated outside the housing. The module is prevented from rotating relative to the manifold by having the outer ends of its spindle or bearings engaging with matching recesses in the end of a manifold feed attachment (10), and is sealed by a compression joint (12).

IPC 1-7

F02M 35/10

IPC 8 full level

F02M 35/104 (2006.01); **F02D 9/10** (2006.01); **F02D 11/10** (2006.01); **F02M 35/10** (2006.01)

CPC (source: EP US)

F02M 35/10032 (2013.01 - EP US); **F02M 35/10052** (2013.01 - EP US); **F02M 35/10222** (2013.01 - EP US); **F02M 35/10255** (2013.01 - EP US); **F02M 35/112** (2013.01 - EP US); **F02D 9/105** (2013.01 - EP US); **F02M 35/10111** (2013.01 - EP US); **F02M 35/10321** (2013.01 - EP US); **F02M 35/10327** (2013.01 - EP US); **F05C 2201/021** (2013.01 - EP US)

Cited by

EP2184468A1; EP1306542A1; FR2831217A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0987429 A1 20000322; **EP 0987429 B1 20040414**; AT E264453 T1 20040415; DE 69916387 D1 20040519; DE 69916387 T2 20050504; FR 2783283 A1 20000317; FR 2783283 B1 20001124; JP 2000087764 A 20000328; JP 4266451 B2 20090520; US 6182628 B1 20010206

DOCDB simple family (application)

EP 99440243 A 19990907; AT 99440243 T 19990907; DE 69916387 T 19990907; FR 9811526 A 19980914; JP 24304899 A 19990830; US 39560099 A 19990914