

Title (en)

Device having at least one throttle valve and method of making this device

Title (de)

Vorrichtung mit mindestens einer Drosselklappe und Verfahren zum Herstellen dieser Vorrichtung

Title (fr)

Dispositif comportant au moins une valve d'étranglement et procédé pour fabriquer ce dispositif

Publication

**EP 0708232 B1 19980225 (DE)**

Application

**EP 95115332 A 19950928**

Priority

DE 9416842 U 19941019

Abstract (en)

[origin: EP0708232A2] At least one, pref. two weld connection points are located between the shaft (7) and throttle valve (8). The connection points are adjacent to each other in axial direction (10) of the shaft, and symmetrical to a centre of the throttle valve. The welding is laser welding. The shaft has an extension to fix the throttle valve in circumferential direction. The extension is accommodated in a central recess in the valve. The shaft has stationary sleeves (16) and the valve is located between two of these sleeves. The throttle valve has a max. closed position of 3 deg., and it encloses an angle of 3" with a plane at right-angles to the intake bore (4).

IPC 1-7

**F02D 9/10**; **F16K 1/22**

IPC 8 full level

**F02D 9/10** (2006.01); **F16K 1/22** (2006.01)

CPC (source: EP)

**F02D 9/101** (2013.01); **F02D 9/1095** (2013.01)

Cited by

EP1231370A3; CN104024604A; KR20140108654A; DE10055397A1; EP0861977A3; FR2883620A1; EP1707780A1; DE10140410A1; US10358986B2; WO2013102562A1

Designated contracting state (EPC)

AT BE DE ES FR GB IE IT NL SE

DOCDB simple family (publication)

**EP 0708232 A2 19960424**; **EP 0708232 A3 19960529**; **EP 0708232 B1 19980225**; AT E163460 T1 19980315; DE 59501486 D1 19980402; DE 9416842 U1 19941215; ES 2113146 T3 19980416

DOCDB simple family (application)

**EP 95115332 A 19950928**; AT 95115332 T 19950928; DE 59501486 T 19950928; DE 9416842 U 19941019; ES 95115332 T 19950928