

Title (en)  
Structure for coupling shaft and valve in throttle body

Title (de)  
Struktur zum Verbinden einer Welle mit einer Klappe in einem Drosselklappenstutzen

Title (fr)  
Structure pour coupler un arbre avec une valve dans un corps de papillon

Publication  
**EP 1128040 A2 20010829 (EN)**

Application  
**EP 01103968 A 20010219**

Priority  
JP 2000044976 A 20000222

Abstract (en)  
A structure for coupling a throttle valve (12) and a throttle shaft (13) in a throttle body reliably receives thrust force applied to the throttle shaft (13), and assures smooth rotation of the throttle shaft (13) and a wide open area of a bore when the throttle valve (12) is fully opened. In this structure, the throttle valve (12) is in the shape of a disc, and the throttle shaft (13) is in the shape of a plate parallel to the throttle valve (12), and is formed with a recess (13e). The throttle valve has a through-hole (12b), and projections (12d) to be fitted in the recess (13e) of the throttle shaft (13). Further, a thrust surface (12e) is formed at an entrance of the through-hole (12b), and receives thrust force applied to the throttle shaft (13) when brought into contact with an inner surface of a bore. <IMAGE>

IPC 1-7  
**F02D 9/10**

IPC 8 full level  
**F02D 9/00** (2006.01); **F02D 9/10** (2006.01); **F16K 1/22** (2006.01)

CPC (source: EP)  
**F02D 9/10** (2013.01); **F02D 9/107** (2013.01); **F05C 2201/021** (2013.01)

Cited by  
US8430079B2; WO2009071403A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1128040 A2 20010829**; **EP 1128040 A3 20020821**; JP 2001234760 A 20010831

DOCDB simple family (application)  
**EP 01103968 A 20010219**; JP 2000044976 A 20000222