

Title (en)

Throttle valve arrangement for internal combustion engines

Title (de)

Drosselklappenanordnung für Brennkraftmaschinen

Title (fr)

Ensemble de papillon d'étranglement pour moteurs à combustion interne

Publication

EP 1302641 A3 20040630 (DE)

Application

EP 02016455 A 20020723

Priority

DE 10150516 A 20011012

Abstract (en)

[origin: EP1302641A2] The throttle valve assembly has a housing (2) with air duct (3) and disc-like throttle valve (4) swivel mounted on a drive shaft (7) and with a bore (5) and an at least partially rounded sleeve face (8) with two surface parts and two transition faces. The surface parts are spot-symmetrical relative to the rotary axis (10) of the valve and the transition faces are in the drive shaft area. The surface parts have two edge members whereby the edge member facing the air duct wall (9) when the valve is closed is rounded.

IPC 1-7

F02D 9/10; **F16K 1/226**

IPC 8 full level

F02D 9/10 (2006.01)

CPC (source: EP)

F02D 9/1015 (2013.01)

Citation (search report)

- [DA] DE 19802673 A1 19990729 - PIERBURG AG [DE]
- [A] DE 1600880 A1 19710916 - PIERBURG KG A
- [A] US 3596493 A 19710803 - LACHAUSSEE MAURICE, et al
- [A] EP 0507652 A1 19921007 - SOLEX [FR]
- [A] EP 0003131 A2 19790725 - KNUDSEN NORDISK ELECT [DK]

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1302641 A2 20030416; **EP 1302641 A3 20040630**; **EP 1302641 B1 20081210**; DE 10150516 A1 20030417; DE 50213097 D1 20090122; ES 2314013 T3 20090316

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