

Title (en)

Internal combustion engine with intake conduit made at least in part of plastics material

Title (de)

Brennkraftmaschine mit einem zumindest teilweise aus Kunststoff bestehenden Saugrohr

Title (fr)

Moteur à combustion interne avec conduit d'admission faite au moins partiellement en matière plastique

Publication

EP 0736682 A3 19971008 (DE)

Application

EP 96103104 A 19960301

Priority

DE 19508625 A 19950310

Abstract (en)

[origin: DE19508625C1] The engine has an electrically insulated throttle section (12) incorporated in the engine air intake (10), incorporating a throttle plate (14) operated via an electric motor (18). A charge dissipation device for the electrostatic charge at the plastics intake pipe is provided by a connection (26) between the housing of the throttle section and at least one terminal (22) of the electric motor. Pref. the electric motor has 2 terminals (20, 22) each electrically coupled via a high-ohmic resistance (28, 32) with the outer wall of the throttle section at its opposite ends.

IPC 1-7

F02M 35/10; **F02D 11/10**

IPC 8 full level

F02M 35/10 (2006.01); **F02D 9/02** (2006.01); **F02D 9/10** (2006.01); **F02D 11/10** (2006.01); **H05F 3/02** (2006.01)

CPC (source: EP US)

F02D 11/10 (2013.01 - EP US); **H05F 3/02** (2013.01 - EP); **F05C 2225/08** (2013.01 - EP US)

Citation (search report)

- [AP] DE 4401585 A1 19950727 - MANN & HUMMEL FILTER [DE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 15, no. 212 (M - 1118) 30 May 1991 (1991-05-30)

Cited by

DE102013224141A1; US7212388B2; WO03038257A1

Designated contracting state (EPC)

BE DE ES FR GB IT

DOCDB simple family (publication)

DE 19508625 C1 19960605; CN 1069380 C 20010808; CN 1135571 A 19961113; DE 59609202 D1 20020620; EP 0736682 A2 19961009; EP 0736682 A3 19971008; EP 0736682 B1 20020515; ES 2173218 T3 20021016; JP 3987134 B2 20071003; JP H08261020 A 19961008; US 5803430 A 19980908

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DE 19508625 A 19950310; CN 96104315 A 19960119; DE 59609202 T 19960301; EP 96103104 A 19960301; ES 96103104 T 19960301; JP 4696296 A 19960305; US 61268896 A 19960308