

Title (en)

Internal combustion engine air supply device.

Title (de)

Luftzufuhrvorrichtung für Brennkraftmaschine.

Title (fr)

Dispositif d'admission d'air pour moteur à combustion interne.

Publication

EP 0596392 A1 19940511 (EN)

Application

EP 93117350 A 19931026

Priority

IT BO920379 A 19921029

Abstract (en)

An internal combustion engine air supply device (1) comprising a body (7) having a channel (2) for supplying air to the engine; a throttle (3) installed along the channel (2); drive means (4) for operating the throttle (3); and a sensor (27) for detecting the position of the throttle (3). The main characteristic of the present invention consists in the fact that the device (1) comprises an electronic device (34) for controlling the drive means (4) and the sensor (27); and a seat (12) formed in the body (7) and housing the electronic device (34). <IMAGE>

IPC 1-7

F02D 11/10

IPC 8 full level

F02D 11/10 (2006.01)

CPC (source: EP)

F02D 11/10 (2013.01); **F02D 2011/102** (2013.01); **F02D 2400/18** (2013.01)

Citation (search report)

- [XAY] DE 3405935 A1 19850822 - VDO SCHINDLING [DE]
- [Y] DE 2952786 A1 19810924 - HEINZMANN GMBH CO KG FRITZ [DE]
- [XA] EP 0315794 A2 19890517 - BOSCH GMBH ROBERT [DE]
- [A] US 5094212 A 19920310 - KAWAGUCHI YUJI [JP], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 264 (M - 423) 22 October 1985 (1985-10-22)

Cited by

EP1674695A3; EP1342896A3; US7171945B2; EP1281848A3; FR2736678A1; US5672818A; DE19525510B4; EP1167724A4; EP1219804A3; EP0723072A1; US5868114A; USRE39257E; EP0844378A3; EP1050673A3; EP1050674A3; US6729299B2; US6259184B1; WO9623965A1; WO9716638A1; WO9817905A1; WO0031405A3; WO02075135A1; EP1219804A2; USRE42940E; US6373212B1; US6725833B1; US7185629B2; US7458360B2; WO9635047A1; WO9935712A3

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