

Title (en)

Air intake device for a combustion engine

Title (de)

Luftansaugvorrichtung für eine Brennkraftmaschine

Title (fr)

Dispositif d'admission d'air pour un moteur à combustion

Publication

**EP 1170483 A3 20021218 (DE)**

Application

**EP 01114776 A 20010626**

Priority

DE 10032740 A 20000705

Abstract (en)

[origin: EP1170483A2] Air intake device used for internal combustion engines comprises at least two intake pipes (10), each sealed by at least one throttle flap (13). The throttle flaps are connected to each other and are pliant in at least one region to reduce non-uniform distribution of the introduced air. Preferred Features: In the closed position the throttle flap does not stand perpendicular to the direction of air flow. Each throttle flap is as rigid as possible in the region of the shaft (14) and the shaft itself is rigid to torsion. At least one wing of the throttle flap has the pliant region. The wing (15) inclined in the direction of air flow bends against the other wing (16).

IPC 1-7

**F02D 9/10**

IPC 8 full level

**F02D 9/02** (2006.01); **F02D 9/10** (2006.01)

CPC (source: EP US)

**F02D 9/1095** (2013.01 - EP US); **F02D 2009/0279** (2013.01 - EP US)

Citation (search report)

- [X] WO 9635866 A2 19961114 - MANN & HUMMEL FILTER [DE], et al
- [X] US 5181492 A 19930126 - SAUSNER ANDREAS [DE], et al
- [Y] US 4714063 A 19871222 - ODA HIROYUKI [JP], et al
- [Y] US 5098064 A 19920324 - DALY PAUL D [US], et al
- [X] EP 0968360 A1 20000105 - MANN & HUMMEL FILTER [DE]

Designated contracting state (EPC)

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**EP 1170483 A2 20020109**; **EP 1170483 A3 20021218**; DE 10032740 A1 20020221; JP 2002089296 A 20020327; US 2002023620 A1 20020228; US 6478011 B2 20021112

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