

Title (en)

Intake apparatus for internal-combustion engine

Title (de)

Ansaugvorrichtung für eine Brennkraftmaschine

Title (fr)

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

Publication

**EP 1367243 A3 20060607 (EN)**

Application

**EP 03012447 A 20030530**

Priority

JP 2002195258 A 20020530

Abstract (en)

[origin: EP1367243A2] An intake apparatus (1) wherein no excessive stress-induced strain occurs in an intake air measuring portion of a throttle body (2) and hence accurate intake air control can be performed when the amount of intake air is small is provided. An air duct hose-side engagement portion (9) and an intake manifold-side engagement portion (6) of the throttle body are provided with enlarged-diameter portions (C,A), respectively, which have an inner diameter larger than the inner diameter of the intake air measuring portion. The enlarged-diameter portions have a wall thickness (c) smaller than the wall thickness (b) of the measuring portion. Accordingly, strain is absorbed by the enlarged-diameter portions and cannot reach the measuring portion. Therefore, no excessive stress-induced strain occurs in the measuring portion, and accurate intake air control can be performed when the amount of intake air is small.

IPC 8 full level

**F02D 9/10** (2006.01); **F02M 35/10** (2006.01)

CPC (source: EP)

**F02D 9/104** (2013.01)

Citation (search report)

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- [XA] US 6352241 B1 20020305 - HANNEWALD THOMAS [DE], et al
- [A] US 5275375 A 19940104 - SEMENCE PIERRE [FR]
- [X] PATENT ABSTRACTS OF JAPAN vol. 2002, no. 05 3 May 2002 (2002-05-03)
- [X] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 25 12 April 2001 (2001-04-12)
- [X] PATENT ABSTRACTS OF JAPAN vol. 017, no. 612 (M - 1509) 11 November 1993 (1993-11-11)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 05 30 April 1998 (1998-04-30)

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DOCDB simple family (application)

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