

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 B1 20110413 (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)

Designated contracting state (EPC)  
DE FR

DOCDB simple family (publication)  
**EP 1367243 A2 20031203; EP 1367243 A3 20060607; EP 1367243 B1 20110413;** DE 60336694 D1 20110526; JP 2003343289 A 20031203;  
JP 3935926 B2 20070627

DOCDB simple family (application)  
**EP 03012447 A 20030530;** DE 60336694 T 20030530; JP 2002195258 A 20020530