

Title (en)  
AIR INTAKE CONTROL DEVICE FOR ENGINE

Title (de)  
LUFTEINLASSSTEUERVORRICHTUNG FÜR EINEN MOTOR

Title (fr)  
DISPOSITIF DE COMMANDE D'ADMISSION D'AIR POUR UN MOTEUR

Publication  
**EP 2397685 A1 20111221 (EN)**

Application  
**EP 10756009 A 20100319**

Priority  
• JP 2010054822 W 20100319  
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Abstract (en)  
In an air intake control device for an engine in which a throttle body (1) having an air intake path (7) is provided with a bypass (30) communicating with the air intake path (7) while bypassing a throttle valve (8), and the bypass (30) is provided with valve means (31) for opening and closing the bypass (30), an inlet of the bypass (30) is formed of a concave groove (32) formed in an inner surface of the air intake path (7) so as to start from an upstream end of the throttle body (1) and terminate as a dead-end before reaching the throttle valve (8), and a different path (33) of the bypass (30) leading to the concave groove (32) has an opening in a step portion (32c) raised from an inner surface (32b) of the concave groove (32) by one step. With this configuration, the inlet of the bypass does not cause any air intake resistance during outputting operation of the engine, and, even when water drops flow along an inner surface of the air intake path, the water drops can be prevented from entering the bypass.

IPC 8 full level  
**F02D 9/10** (2006.01); **F02D 9/02** (2006.01); **F02M 69/32** (2006.01)

CPC (source: EP)  
**F02D 9/1055** (2013.01); **F02M 69/32** (2013.01); **F02D 2009/0252** (2013.01)

Cited by  
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