

Title (en)  
Exhaust recirculation device for an internal combustion engine

Title (de)  
Abgasrückführleinrichtung für eine Brennkraftmaschine

Title (fr)  
Dispositif de recirculation de gaz d'échappement pour un moteur à combustion interne

Publication  
**EP 1223331 B1 20050316 (DE)**

Application  
**EP 01124739 A 20011017**

Priority  
DE 10101412 A 20010113

Abstract (en)  
[origin: EP1223331A2] An exhaust gas recirculation device (1) for an internal combustion engine comprises an exhaust gas collection line (2) from an outlet system of the engine connected via a rotary disk valve (4) to air inlet channels of the engine. The rotary disk valve has a housing (3) with a switch element corresponding to a control surface having openings to which exhaust gas control channels (5) are assigned. A drive module (6) for the rotary disk valve is provided on the housing. Preferred Features: The drive module is connected via a coupling organ to the axis of rotation of the switch element. The openings of the control surface have a definite geometric shape, e.g. round, elliptical, etc., defining a certain flow characteristic.

IPC 1-7  
**F02M 25/07**

IPC 8 full level  
**F02M 25/07** (2006.01); **F02M 26/54** (2016.01); **F02M 26/70** (2016.01)

CPC (source: EP US)  
**F02M 26/54** (2016.02 - EP US); **F02M 26/70** (2016.02 - EP US); **F02M 26/11** (2016.02 - EP US); **F02M 26/50** (2016.02 - EP US)

Cited by  
EP2143931A3; EP1338785A3; DE102008046594A1

Designated contracting state (EPC)  
DE ES FR GB IT

DOCDB simple family (publication)  
**EP 1223331 A2 20020717; EP 1223331 A3 20040102; EP 1223331 B1 20050316; DE 10101412 A1 20020718; DE 10101412 B4 20140528;**  
DE 50105613 D1 20050421; ES 2236110 T3 20050716; US 2002092510 A1 20020718; US 6651634 B2 20031125

DOCDB simple family (application)  
**EP 01124739 A 20011017; DE 10101412 A 20010113; DE 50105613 T 20011017; ES 01124739 T 20011017; US 3758002 A 20020104**