

Title (en)

Control valve, especially for an internal combustion engine, for controlled exhaust gas recirculation

Title (de)

Steuerventil, insbesondere für eine Brennkraftmaschine, zur gesteuerten Rückführung von Abgas

Title (fr)

Soupape de commande, notamment pour un moteur à combustion interne, pour la recirculation de gaz d'échappement contrôlé

Publication

**EP 1338785 B1 20110105 (DE)**

Application

**EP 02025157 A 20021111**

Priority

DE 10207922 A 20020223

Abstract (en)

[origin: EP1338785A2] The valve parts rotate relative to each other between an open position allowing exhaust gas throughput and a closed position blocking exhaust gas throughput. Bars (23) surrounding the through openings and protruding to one axial side of one valve part run along the limiting edges which surround the through openings of the valve part. With their free narrow surfaces the bars form bearing surfaces for the second valve part, which is formed as a flat surface on its side facing the valve part. The valve part lies with this flat surface on the narrow surfaces of bars and slides by relative rotation. Control valve has two valve parts (14,44) lying on each other with one side (46) and having through openings (15,45). Preferred Features: Two separate exhaust gas feed channels, each assigned to a cylinder bank of an internal combustion engine, are located upstream of the first valve and the second valve.

IPC 8 full level

**F02M 25/07** (2006.01)

CPC (source: EP US)

**F02M 26/68** (2016.02 - EP US); **F02M 26/11** (2016.02 - EP US); **F02M 26/48** (2016.02 - EP US); **F02M 26/50** (2016.02 - EP US); **F02M 26/54** (2016.02 - EP US); **F02M 26/72** (2016.02 - EP US); **Y10T 137/428** (2015.04 - EP US)

Cited by

EP2143931A3; EP1355057A3; US2015000270A1; US9322327B2; US8820068B2; WO2007098854A1; WO2009103955A3; WO2012082713A1

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

**EP 1338785 A2 20030827**; **EP 1338785 A3 20060524**; **EP 1338785 B1 20110105**; BR 0300220 A 20040803; BR 0300220 B1 20120403; DE 10207922 A1 20030904; DE 50214848 D1 20110217; MX PA02012952 A 20040903; US 2003160199 A1 20030828; US 6726174 B2 20040427

DOCDB simple family (application)

**EP 02025157 A 20021111**; BR 0300220 A 20030220; DE 10207922 A 20020223; DE 50214848 T 20021111; MX PA02012952 A 20021219; US 32301502 A 20021219