

Title (en)

REGULATING DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

REGELVORRICHTUNG FÜR EINE VERBRENNUNGSKRAFTMASCHINE

Title (fr)

DISPOSITIF DE RÉGULATION POUR UN MOTEUR À COMBUSTION INTERNE

Publication

**EP 2089619 A1 20090819 (DE)**

Application

**EP 07803398 A 20070911**

Priority

- EP 2007059527 W 20070911
- DE 102006054041 A 20061116

Abstract (en)

[origin: WO2008058779A1] It is known to regulate a gas flow in an internal combustion engine by means of flaps. Here, there is often the problem of precise volume flow regulation with a flap which is only slightly open. In order to achieve said object, it is proposed to design the flap (4, 5) to be of two-vane design and to form a convexity (63, 64) on in each case one of the two vane surfaces of each flap vane (61, 62), which convexity (63, 64) extends over the periphery of the respective vane surface and, in the open state of the flap (4, 5), is aligned toward that side of the duct (6, 7) against which the respective flap vane (61, 62) bears in the closed state. This has the result that, in the event of a slight rotation of the flap (4, 5) from the closed position, the convexity (63, 64) slightly narrows the otherwise existing gap, so as to result in a smaller volume flow than in the case of other known flaps.

IPC 8 full level

**F02D 9/10** (2006.01); **F02M 25/07** (2006.01); **F16K 1/22** (2006.01)

CPC (source: EP)

**F02D 9/101** (2013.01); **F02D 9/1055** (2013.01); **F02D 9/1065** (2013.01); **F16K 27/0218** (2013.01); **F16K 27/029** (2013.01); **F16K 35/14** (2013.01)

Citation (search report)

See references of WO 2008058779A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**DE 102006054041 B3 20080508**; EP 2089619 A1 20090819; WO 2008058779 A1 20080522

DOCDB simple family (application)

**DE 102006054041 A 20061116**; EP 07803398 A 20070911; EP 2007059527 W 20070911