

Title (en)

Flap device for an exhaust gas system of an internal combustion engine

Title (de)

Klappenvorrichtung für ein Abgassystem einer Verbrennungskraftmaschine

Title (fr)

Dispositif de clapets pour un système de gaz d'échappement d'un moteur à combustion interne

Publication

EP 2372136 B1 20140507 (DE)

Application

EP 11156436 A 20110301

Priority

DE 102010013477 A 20100330

Abstract (en)

[origin: EP2372136A2] The flap device comprises a housing (2), a gas flow-throughable channel (4), which is formed in the housing, and a flap body (14), which is mounted on a shaft (12). An actuator is provided, by which the shaft is displaced in a rotating manner. A support unit is provided, by which the shaft is rotatably supported in the housing for the flap body. One of the supports of the support unit is a plastic bush (36).

IPC 8 full level

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

CPC (source: EP)

F02D 9/106 (2013.01); **F02D 9/108** (2013.01); **F02M 26/70** (2016.02)

Cited by

DE102014104579A1; DE102014104579B4; US10294896B2; US10145310B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2372136 A2 20111005; EP 2372136 A3 20120919; EP 2372136 B1 20140507; DE 102010013477 A1 20111006;
DE 102010013477 B4 20181011; ES 2480281 T3 20140725

DOCDB simple family (application)

EP 11156436 A 20110301; DE 102010013477 A 20100330; ES 11156436 T 20110301