

Title (en)

Mixing valve of a combustion engine of a motor vehicle

Title (de)

Mischventil einer Brennkraftmaschine eines Kraftfahrzeuges

Title (fr)

Vanne mélangeuse d'un moteur à combustion d'un véhicule automobile

Publication

**EP 2653709 A1 20131023 (DE)**

Application

**EP 12464005 A 20120418**

Priority

EP 12464005 A 20120418

Abstract (en)

The valve has two flaps arranged in a suction passage and an exhaust gas passage, respectively. Two shafts hold the flaps, respectively. The suction- and gas passages open into a common collecting duct (7). A drive device drives the flaps and comprises control disks (17) that are located on the shafts in a torque-proof manner, and drive pinions that are rotatably arranged on the shafts. The disks and the pinions comprise drivers (22-25) that correspond to each other. The pinions engage with a common pinion, and the disks are pre-tensioned in a normal position by a spring element (31). The spring element is designed as a spring clip.

Abstract (de)

Ein Mischventil (6) einer Brennkraftmaschine (1) eines Kraftfahrzeuges hat eine Antriebseinrichtung (8) mit jeweils einem Antriebsritzel (18, 19) und einer Steuerscheibe (16, 17) zum Antrieb zweier Klappen (10, 11). Ein einziger Stellmotor (9) zum Antrieb der Antriebsritzel (18, 19) ist in einem Eckbereich eines Abgaskanals (5) und eines Ansaugkanals (4) angeordnet. Das Mischventil (6) gestaltet sich besonders kompakt.

IPC 8 full level

**F02M 25/07** (2006.01)

CPC (source: EP US)

**F02D 9/1065** (2013.01 - EP US); **F02M 26/21** (2016.02 - EP US); **F02M 26/51** (2016.02 - EP US); **F02M 26/53** (2016.02 - EP US); **F02M 26/64** (2016.02 - EP US); **F02M 26/70** (2016.02 - EP US); **F02D 41/0077** (2013.01 - EP US); **F02D 2009/0276** (2013.01 - EP US); **F02D 2041/0017** (2013.01 - EP US); **F02M 26/54** (2016.02 - EP US)

Citation (search report)

- [XY] US 2012056118 A1 20120308 - YOKOYAMA MASAYUKI [JP], et al
- [Y] FR 2954407 A1 20110624 - VALEO SYS CONTROLE MOTEUR SAS [FR]
- [Y] FR 2954408 A1 20110624 - VALEO SYS CONTROLE MOTEUR SAS [FR]
- [A] FR 2926114 A1 20090710 - VALEO SYS CONTROLE MOTEUR SAS [FR]

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2653709 A1 20131023**; CN 104246199 A 20141224; CN 104246199 B 20180116; US 2015059717 A1 20150305; US 9869280 B2 20180116; WO 2013156373 A1 20131024

DOCDB simple family (application)

**EP 12464005 A 20120418**; CN 201380019981 A 20130411; EP 2013057537 W 20130411; US 201314395382 A 20130411