

Title (en)

DEVICE FOR COOLING AN EXHAUST GAS RECIRCULATION (EGR) FLOW OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VORRICHTUNG ZUR KÜHLUNG EINES DURCHFLUSSES EINER ABGASRÜCKFÜHRUNG (AGR) EINES VERBRENNUNGSMOTORS

Title (fr)

DISPOSITIF DE REFROIDISSEMENT D'UN DÉBIT DE RECIRCULATION DE GAZ D'ÉCHAPPEMENT (EGR) D'UN MOTEUR À COMBUSTION INTERNE

Publication

EP 3514365 A1 20190724 (EN)

Application

EP 18152001 A 20180117

Priority

EP 18152001 A 20180117

Abstract (en)

A device for cooling an exhaust gas recirculation (EGR) flow of an internal combustion engine comprises a body (2) with an inlet (3) and an outlet (4) for the EGR flow, defining a circuit for the EGR flow, and two heat exchanger modules (5, 6) for cooling the EGR flow, arranged in series or in parallel in the circuit. The device comprises a primary by-pass passage (16) arranged in parallel with both heat exchanger modules (5, 6) and a single valve element (19) pivotally connected within the body (2) around an articulation axis (20), to direct the EGR flow through both heat exchanger modules (5, 6), or through only one of the heat exchanger modules (5), or only through the primary by-pass passage (16). The valve element includes two door portions (19A, 19B) extending from the articulation axis and rigidly connected to each other.

IPC 8 full level

F02M 26/24 (2016.01); **F02M 26/26** (2016.01); **F02M 26/32** (2016.01); **F28D 7/00** (2006.01); **F28D 21/00** (2006.01)

CPC (source: EP)

F02M 26/24 (2016.02); **F02M 26/26** (2016.02); **F02M 26/32** (2016.02); **F28D 7/1638** (2013.01); **F28D 21/0003** (2013.01); **F28F 27/02** (2013.01); **F02M 26/12** (2016.02); **F28F 2250/06** (2013.01)

Citation (applicant)

US 8528529 B2 20130910 - EWEN KENNETH ALFRED [GB]

Citation (search report)

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- [X] US 7581533 B1 20090901 - MORAN ROBERT J [US]
- [A] DE 102016205753 A1 20171012 - BAYERISCHE MOTOREN WERKE AG [DE]
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- [A] GB 2473821 A 20110330 - GM GLOBAL TECH OPERATIONS INC [US]
- [AD] US 2013000619 A1 20130103 - EWEN KENNETH ALFRED [GB]

Cited by

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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)

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