

Title (en)

Heat exchanger for an EGR system with an integrated by-pass duct.

Title (de)

Wärmeaustauscher für ein EGR System mit integrierter Bypassleitung

Title (fr)

Echangeur de chaleur pour un système EGR avec un conduit de dérivation intégré

Publication

**EP 1367253 A1 20031203 (EN)**

Application

**EP 03380127 A 20030528**

Priority

ES 200201218 A 20020528

Abstract (en)

A heat exchanger (1) for an EGR system with an integrated by-pass duct (9). A heat exchanger for recirculated exhaust gases of an internal combustion engine is proposed with an integrated by-pass duct (9) through which the exhaust gases can recirculate during the engine starting and/or in low temperature or load conditions. <??>The exchanger is formed by a cylindrical casing (2) inside of which the typical refrigeration chamber (3) in this type of devices is assembled, as well as the by-pass duct (9) . As a coupling means to the gas intake device of the EGR system, a flange (15,16) is used with a housing for the refrigerating tubes of the refrigeration chamber and another housing (22) for the by-pass duct; with a separation area (23) between said housings. <??>The by-pass duct can be a double-walled duct with an intermediate air chamber to prevent the cooling of the gases circulating through it. <IMAGE>

IPC 1-7

**F02M 25/07**; **F28F 27/02**

IPC 8 full level

**F02M 25/07** (2006.01); **F28D 7/16** (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP ES)

**F02M 26/25** (2016.02 - EP); **F28D 7/163** (2013.01 - EP ES); **F28F 9/0278** (2013.01 - EP); **F02M 26/32** (2016.02 - EP); **F28D 21/0003** (2013.01 - EP)

Citation (applicant)

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- US 5203311 A 19930420 - HITOMI MITSUO [US], et al
- US 5617726 A 19970408 - SHERIDAN TODD A [US], et al
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Citation (search report)

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