Title (en)

MOTOR ARRANGEMENT WITH INTEGRATED EXHAUST GAS MANIFOLD

Title (de)

MOTORANORDNUNG MIT INTEGRIERTEM ABGASKRÜMMER

Title (fr)

SYSTÈME DE MOTEUR À COLLECTEUR D ÉCHAPPEMENT INTÉGRÉ

Publication

EP 2324226 A1 20110525 (DE)

Application

EP 09781513 A 20090805

Priority

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Abstract (en)

[origin: WO2010015654A1] It is proposed that the exhaust gas manifold be integrated into the cylinder head (100), a first for turbo applications, and that an associated cooling concept be provided. In the process, significant attribute improvements can be accomplished while at the same time achieving much lower system costs. For example, the advantages of this application are illustrated using a four cylinder gasoline engine with direct injection and turbocharging. What are particularly notable are the reduced fuel usage in full load and near full load ranges, lower CO2 emissions in European driving cycles, faster catalytic converter start, improved engine warm-up and heating of the vehicle cab, and significant reduction of complexity by eliminating the classical exhaust gas manifold and the significant weight and cost reduction associated therewith.

IPC 8 full level

F02F 1/24 (2006.01); **F01N 3/04** (2006.01); **F02F 1/40** (2006.01)

CPC (source: EP US)

F01N 3/08 (2013.01 - EP US); **F01N 13/105** (2013.01 - EP US); **F02F 1/243** (2013.01 - EP US); **F02F 1/40** (2013.01 - EP US); **F02F 1/4264** (2013.01 - EP US); F01P 2060/08 (2013.01 - EP US)

Citation (search report)

See references of WO 2010015654A1

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Designated extension state (EPC)

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DOCDB simple family (publication)

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