

Title (en)

Air gap insulated exhaust manifold

Title (de)

Luftspaltisolierter Abgaskrümmer

Title (fr)

Collecteur d'échappement isolé par une couche d'air

Publication

EP 1591636 B1 20070613 (DE)

Application

EP 05101601 A 20050302

Priority

DE 102004021196 A 20040429

Abstract (en)

[origin: EP1591636A1] The manifold has an inside pipe (11) mounted on an outside pipe (10) only in an attachment area (15) which is arranged with respect to a longitudinal direction (3) approximately centrally between an outlet opening (4) and an inlet opening (5) which is at the greatest distance from the outlet opening. A flange (6) extends in the longitudinal direction. A collecting line (2) extends in a longitudinal direction (3). The outlet opening is oriented in the longitudinal direction. Multiple inlet openings are formed along the longitudinal direction.

IPC 8 full level

F01N 13/10 (2010.01)

CPC (source: EP US)

F01N 13/102 (2013.01 - EP US); **F01N 2470/24** (2013.01 - EP US)

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1591636 A1 20051102; EP 1591636 B1 20070613; AT E364779 T1 20070715; DE 102004021196 A1 20051124; DE 102004021196 B4 20061005; DE 502005000840 D1 20070726; US 2005241303 A1 20051103; US 7434390 B2 20081014

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