

Title (en)  
Air gap manifold

Title (de)  
Luftspaltkrümmer

Title (fr)  
Collecteur à couche d'air

Publication  
**EP 1522687 B1 20100505 (DE)**

Application  
**EP 04018050 A 20040729**

Priority  
DE 10346552 A 20031007

Abstract (en)  
[origin: EP1522687A2] The manifold has an interior part (1) with exhaust gas guides (2, 3, 4) plugged into one another with a sliding fit, and an exterior part (5) surrounding the inner part. An air-gap (6) is formed between the interior part and the exterior part, and effects a heat insulation of an exhaust manifold. The exhaust gas guides are formed by half-shells which are connected to one another by common reshaping at a rim side. An independent claim is also included for a method of manufacturing an air-gap manifold.

IPC 8 full level  
**F01N 13/10** (2010.01); **F01N 13/08** (2010.01); **F01N 13/18** (2010.01); **F02B 37/00** (2006.01)

CPC (source: EP KR US)  
**F01N 13/10** (2013.01 - KR); **F01N 13/102** (2013.01 - EP US); **F01N 13/1872** (2013.01 - EP US); **F01N 13/1894** (2013.01 - EP US);  
**F01N 2450/22** (2013.01 - EP US); **F01N 2470/24** (2013.01 - EP US); **F01N 2530/04** (2013.01 - EP US); **F02B 37/00** (2013.01 - EP US)

Citation (examination)  
EP 0582985 A1 19940216 - EBERSPAECHER J [DE]

Cited by  
EP2075432A1; US8196302B2; US8375707B2

Designated contracting state (EPC)  
AT DE FR IT

DOCDB simple family (publication)  
**EP 1522687 A2 20050413**; **EP 1522687 A3 20051130**; **EP 1522687 B1 20100505**; **EP 1522687 B2 20140924**; AT E467038 T1 20100515;  
DE 10346552 A1 20050630; DE 502004011121 D1 20100617; JP 2005113910 A 20050428; KR 20050033843 A 20050413;  
US 2005072143 A1 20050407

DOCDB simple family (application)  
**EP 04018050 A 20040729**; AT 04018050 T 20040729; DE 10346552 A 20031007; DE 502004011121 T 20040729; JP 2004270724 A 20040917;  
KR 20040079828 A 20041007; US 95546504 A 20040929