

Title (en)

Exhaust manifold with thin flanges

Title (de)

Abgaskrümmer mit dünnen Flanschen

Title (fr)

Collecteur d'échappement avec des brides minces

Publication

**EP 2450543 A1 20120509 (EN)**

Application

**EP 11188155 A 20111108**

Priority

IB 2010003156 W 20101108

Abstract (en)

An exhaust manifold (1) for an engine (5), the exhaust manifold (1) comprising: at least one collecting pipe (7) for conveying exhaust gases, - several exhaust gases inlets (9) in fluid communication with the collecting pipe (7), - several flanges (11) each defining one of the exhaust gases inlet (9), each flange (11) having an external face (13) adapted to be pressed against a receiving surface (15) of the engine (5), - several backflanges (17), each backflange (17) being associated to one of the flanges (11) and being adapted to press the corresponding flange (11) against the receiving surface (15). The flanges (11) are areas of a single plate (33), the plate (33) having a thickness between 0.2 and 2 mm, said areas being continuously connected to one another by other areas (35) of the plate (33), the collecting pipe (7) being not integral with the plate (33), the manifold (1) having leaktight connections (37) connecting the collecting pipe (7) to each of the flange (11).

IPC 8 full level

**F01N 13/18** (2010.01); **F01N 13/10** (2010.01); **F01N 13/14** (2010.01)

CPC (source: EP KR US)

**F01N 13/10** (2013.01 - KR US); **F01N 13/102** (2013.01 - EP US); **F01N 13/105** (2013.01 - EP US); **F01N 13/141** (2013.01 - EP US); **F01N 13/1805** (2013.01 - EP US); **F01N 13/1816** (2013.01 - EP US); **F01N 13/1872** (2013.01 - EP US)

Citation (applicant)

- FR 2549529 A1 19850125 - WITZENMANN METALLSCHLAUCHFAB [DE]
- DE 10343149 A1 20050504 - OPEL ADAM AG [DE]

Citation (search report)

- [XAYI] US 6789386 B1 20040914 - HAERLE HANS A [DE]
- [Y] EP 0171624 A1 19860219 - WITZENMANN METALLSCHLAUCHFAB [DE]
- [X] DE 20101645 U1 20020606 - HAERLE HANS A [DE]

Cited by

EP3001004A1; EP2746546A1; US9689302B2

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

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