

Title (en)
Exhaust manifold

Title (de)
Abgaskrümmer

Title (fr)
Collecteur de gaz d'échappement

Publication
EP 2075431 B2 20150318 (DE)

Application
EP 08171417 A 20081212

Priority
DE 102007062660 A 20071224

Abstract (en)
[origin: EP2075431A1] The exhaust manifold (1) has a housing (2), from which multiple inlet pipes (4) extend. The inlet pipes are guided to the cylinders of an internal combustion engine (5) in the installation condition. A flange (3) is welded with the inlet pipes and is screwed with a screw connection (9) at a cylinder head (8) of the internal combustion engine in the installation condition. The flange is subdivided into two partial flanges (3') in a longitudinal direction (6) of the exhaust manifold.

IPC 8 full level
F01N 13/10 (2010.01); **F01N 13/08** (2010.01); **F01N 13/18** (2010.01)

CPC (source: EP US)
F01N 13/10 (2013.01 - EP US); **F01N 13/102** (2013.01 - EP US); **F01N 13/107** (2013.01 - EP US); **F01N 13/1827** (2013.01 - EP US); **F01N 13/1838** (2013.01 - EP US); **F01N 2450/24** (2013.01 - EP US)

Citation (opposition)
Opponent :

- EP 0918148 A2 19990526 - GILLET HEINRICH GMBH [DE]
- DE 4226171 A1 19940210 - BISCHOFF ERHARDT GMBH CO KG [DE]
- US 2002174650 A1 20021128 - DURR GERD [DE], et al
- DE 10125121 A1 20021128 - DAIMLER CHRYSLER AG [DE], et al

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2075431 A1 20090701; **EP 2075431 B1 20100728**; **EP 2075431 B2 20150318**; AT E475795 T1 20100815; CN 101469630 A 20090701; CN 101469630 B 20120523; DE 102007062660 A1 20090625; DE 502008001025 D1 20100909; JP 2009150395 A 20090709; JP 5544084 B2 20140709; US 2009158723 A1 20090625; US 2012266588 A1 20121025; US 8230680 B2 20120731; US 8850805 B2 20141007

DOCDB simple family (application)
EP 08171417 A 20081212; AT 08171417 T 20081212; CN 200810187232 A 20081217; DE 102007062660 A 20071224; DE 502008001025 T 20081212; JP 2008324860 A 20081222; US 201213533644 A 20120626; US 33695608 A 20081217