

Title (en)

HEAT-RESISTANT CAST STEEL EXHAUST MANIFOLD

Title (de)

ABGASKRÜMMER AUS WÄRMEBESTÄNDIGEM GUSSSTAHL

Title (fr)

TUBULURE D'ECHAPPEMENT EN ACIER COULE RESISTANT A LA CHALEUR

Publication

EP 1985820 A4 20100106 (EN)

Application

EP 07714523 A 20070219

Priority

- JP 2007052997 W 20070219
- JP 2006040499 A 20060217

Abstract (en)

[origin: EP1985820A1] An exhaust manifold made of heat-resistant cast steel comprising pluralities of flanges each having a hole connected to each exhaust port of a cylinder head of an engine with bolts, pluralities of ports connected to the flanges, and a convergence portion in which the ports are converging, the thickness of the flanges being 80-150% of that of the ports.

IPC 1-7

F01N 7/10

IPC 8 full level

F01N 13/10 (2010.01); **B22C 9/24** (2006.01); **F01N 13/08** (2010.01)

CPC (source: EP KR US)

B22C 9/24 (2013.01 - EP US); **F01N 13/08** (2013.01 - KR); **F01N 13/10** (2013.01 - EP KR US); **F01N 13/1805** (2013.01 - EP US); **F01N 13/1861** (2013.01 - EP US); **F01N 2450/22** (2013.01 - EP US); **F01N 2530/00** (2013.01 - EP US)

Citation (search report)

- [X] US 6256990 B1 20010710 - ITOH KENJI [JP]
- [A] EP 0955453 A2 19991110 - BOYSEN FRIEDRICH GMBH CO KG [DE]
- [A] US 4182122 A 19800108 - ENGQUIST KARL R [US], et al
- [A] US 5566548 A 19961022 - KHURANA GREESH [US]
- See references of WO 2007094500A1

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

EP 1985820 A1 20081029; **EP 1985820 A4 20100106**; **EP 1985820 B1 20120905**; CN 101384803 A 20090311;
JP WO2007094500 A1 20090709; KR 20080096666 A 20081031; US 2009064670 A1 20090312; WO 2007094500 A1 20070823

DOCDB simple family (application)

EP 07714523 A 20070219; CN 200780005654 A 20070219; JP 2007052997 W 20070219; JP 2008500590 A 20070219;
KR 20087019988 A 20080814; US 27948207 A 20070219