Title (en)

Exhaust device for multicylinder internal combustion engines

Title (de)

Abgasanlage für mehrzylindrige Verbrennungsmotoren

Title (fr)

Dispositif d'échappement pour moteurs à combustion interne multicylindres

Publication

EP 1291500 A3 20051005 (DE)

Application

EP 02017485 A 20020805

Priority

DE 10144015 A 20010907

Abstract (en)

[origin: EP1291500A2] Exhaust system for multicylinder internal combustion engines comprises an exhaust gas manifold with an arrangement consisting of exhaust gas pipes and at least one exhaust gas catalyst (3) branching in the direction of the engine and connected on one engine side to its exhaust gas outlet openings. The exhaust gas outlet side of the branched exhaust pipe arrangement is formed by two adjacent gas outlet openings, each flow-connected to one part of the branched exhaust pipes and to which is connected a pipe (13', 13") of a double pipe arrangement (13) having two parallel pipes. The other gas outlet side end opens into a flow sleeve (16) arranged in front of the exhaust gas catalyst. Preferred Features: The double pipe arrangement is guided up to just before the lambda sensor (17) of the exhaust gas catalyst and/or the lambda sensor is arranged in the flow sleeve.

IPC 1-7

F01N 7/08; F01N 7/10; F01N 3/28

IPC 8 full level

F01N 3/28 (2006.01); **F01N 13/00** (2010.01); **F01N 13/08** (2010.01); **F01N 13/10** (2010.01); **F01N 13/14** (2010.01); **F01N 13/18** (2010.01)

CPC (source: EP)

F01N 3/28 (2013.01); **F01N 3/2892** (2013.01); **F01N 13/008** (2013.01); **F01N 13/08** (2013.01); **F01N 13/10** (2013.01); **F01N 13/102** (2013.01); **F01N 13/107** (2013.01); **F01N 13/14** (2013.01); **F01N 13/1883** (2013.01); **F01N 13/1888** (2013.01); F01N 13/1805 (2013.01); F01N 2240/20 (2013.01); F01N 2260/08 (2013.01); F01N 2260/10 (2013.01); F01N 2470/10 (2013.01); F01N 2470/30 (2013.01)

Citation (search report)

- [X] US 3938330 A 19760217 - NAKAJIMA YASUO, et al
- [X] EP 0753651 A1 19970115 - OPEL ADAM AG [DE]
- [A] FR 2586753 A1 19870306 - PEUGEOT CYCLES [FR]
- [A] US 6082103 A 20000704 - SUGIURA SHIGEKI [JP], et al
- [A] US 4745742 A 19880524 - NADA MITSUHIRO [JP], et al
- [A] DE 19945266 A1 20010329 - DAIMLER CHRYSLER AG [DE]
- [A] DE 4228187 A1 19940303 - HDE METALLWERK GMBH [DE]
- [A] DE 19819946 A1 19991111 - BOYSEN FRIEDRICH GMBH CO KG [DE]
- [A] EP 1016778 A2 20000705 - HITACHI METALS LTD [JP]
- [X] EP 0171624 A1 19860219 - WITZENMANN METALLSCHLAUCHFAB [DE]
- [A] DE 19923557 A1 20001130 - DAIMLER CHRYSLER AG [DE]
- [A] US 4644747 A 19870224 - PETERSEN DONALD R [US]
- [A] US 5331810 A 19940726 - INGERMANN KEITH C [US], et al
- [X] KANDYLAS I P ET AL: "Engine exhaust system design based on heat transfer computation", ENERGY CONVERSION AND MANAGEMENT, ELSEVIER SCIENCE PUBLISHERS, OXFORD, GB, vol. 40, no. 10, July 1999 (1999-07-01), pages 1057 - 1072, XP004162444, ISSN: 0196-8904
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 263 (M - 1415) 24 May 1993 (1993-05-24)
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 220 (M - 330) 6 October 1984 (1984-10-06)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 05 30 April 1998 (1998-04-30)
- [X] PATENT ABSTRACTS OF JAPAN vol. 014, no. 224 (M - 0972) 11 May 1990 (1990-05-11)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 563 (M - 1693) 27 October 1994 (1994-10-27)

Cited by

CN105257382A; DE102011084528A1; EP2075430A1; JP2016050541A; EP2075431A1; US8375707B2; US8196302B2; US10584627B2; US8230680B2; US8850805B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

EP 1291500 A2 20030312; **EP 1291500 A3 20051005**; **EP 1291500 B1 20080416**; AT E392541 T1 20080515; DE 10144015 A1 20030327; DE 50212097 D1 20080529

DOCDB simple family (application)

EP 02017485 A 20020805; AT 02017485 T 20020805; DE 10144015 A 20010907; DE 50212097 T 20020805