

Title (en)

Device for catalytic purification or decomposition of hot exhaust gases

Title (de)

Vorrichtung zur katalytischen Reinigung bzw. Zerlegung von heißen Abgasen

Title (fr)

Dispositif pour la purification ou la décomposition de gaz d'échappement chauds

Publication

EP 0693616 A1 19960124 (DE)

Application

EP 95107130 A 19950511

Priority

DE 4425995 A 19940722

Abstract (en)

The exhaust gases are passed through a two stage catalyst comprising a metal catalyst (10) which rapidly reaches the operating temperature after starting the engine and a ceramic catalyst (2) for normal operation. The metal catalyst is mounted on an inner support wall spaced from the outer wall of the catalyst by an air space to minimise thermal conduction. The inlet end of the catalyst housing is made of two concentric cone sections to form the insulating air space. The rear end of the inner wall is supported on a shaped insert ring (11) braced on the front lip of the ceramic catalyst support. The ceramic catalyst is slid axially into the housing and locates against a stop prior to sealing the housing. <IMAGE>

Abstract (de)

Erfindungsgemäß durchströmen die Abgase nacheinander einen metallischen (10) sowie zumindest einen keramischen Katalysatorträger (2), die in einem gemeinsamen Gehäuse (1) untergebracht sind, wobei der Metallmantel (10') des metallischen Katalysatorträgers (10) von der Gehäusewand durch einen ringförmigen Luftspalt (9) bzw. Abstandsraum beabstandet ist, um einen übermäßigen Wärmeübergang zu verhindern. <IMAGE>

IPC 1-7

F01N 3/28

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] EP 0363878 A2 19900418 - ZEUNA STAERKER KG [DE]
- [A] US 4163041 A 19790731 - GAYSERT GERHARD [DE]
- [A] EP 0316637 A1 19890524 - BAYERISCHE MOTOREN WERKE AG [DE]
- [A] US 4413392 A 19831108 - OTANI JUNJI [JP], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 405 (M - 868) 7 September 1989 (1989-09-07)

Cited by

US7323030B2; DE19826284B4; CN101907011A; EP0758048A1; EP1653059A1; WO2005098210A1

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