

Title (en)  
CATALYST CARRIER ELEMENT WITH INTERNAL INSULATION

Title (de)  
KATALYSATOR-TRÄGERKÖRPER MIT EINER INNENISOLIERUNG

Title (fr)  
SUPPORT POUR CATALYSEUR AVEC ISOLATION INTERNE

Publication  
**EP 0789807 A1 19970820 (DE)**

Application  
**EP 95936484 A 19951012**

Priority  
• DE 4437718 A 19941021  
• EP 9504027 W 19951012

Abstract (en)  
[origin: DE4437718A1] For the catalytic reaction of exhaust gases in an exhaust system, in particular an exhaust system for use in internal combustion engines, a device is proposed with a catalyst carrier element (1) which is provided with a plurality of channels (2) through which the exhaust gas can flow. The free cross section (4) of flow of the channels (2) is partially closed in the direction of flow of the exhaust gas by plastic deformation of the channel walls (11), specifically, in an outer ring region (3) of the catalyst carrier element (1). The plastic deformation can be carried out using, for example, a tool (17) provided for this purpose with a disc (18) which can rotate about an axis (19). The disc (18) is forced against the catalyst carrier element (1) and the casing (10) to create a plastic deformation of the casing tube (10) and channel walls (11) in the form of a peripheral crimp (20) pointing towards the carrier element (1). Other techniques can be applied to create the plastic deformation. The outer channels thus closed off form a thermal insulation against the casing tube (10) which helps the catalyst carrier element (1) to heat up more rapidly in the cold start phase.

IPC 1-7  
**F01N 3/28**

IPC 8 full level  
**B01D 53/86** (2006.01); **F01N 3/28** (2006.01); **F01N 13/14** (2010.01)

CPC (source: EP US)  
**F01N 3/281** (2013.01 - EP US); **F01N 3/2842** (2013.01 - EP US); **F01N 13/14** (2013.01 - EP US); **F01N 2260/08** (2013.01 - EP US); **F01N 2450/02** (2013.01 - EP US); **F01N 2450/20** (2013.01 - EP US)

Citation (search report)  
See references of WO 9612876A1

Designated contracting state (EPC)  
DE ES FR GB IT

DOCDB simple family (publication)  
**DE 4437718 A1 19960425**; CN 1069947 C 20010822; CN 1161727 A 19971008; DE 59502127 D1 19980610; EP 0789807 A1 19970820; EP 0789807 B1 19980506; JP 3801633 B2 20060726; JP H10508529 A 19980825; RU 2136910 C1 19990910; US 6274099 B1 20010814; WO 9612876 A1 19960502

DOCDB simple family (application)  
**DE 4437718 A 19941021**; CN 95195785 A 19951012; DE 59502127 T 19951012; EP 9504027 W 19951012; EP 95936484 A 19951012; JP 51361896 A 19951012; RU 97108131 A 19951012; US 84380497 A 19970421