

Title (en)  
DIFFUSER FOR EXHAUST GAS CLEANING SYSTEMS

Title (de)  
DIFFUSOR FÜR ABGASREINIGUNGSSYSTEME

Title (fr)  
DIFFUSEUR POUR SYSTEMES D'ÉPURATION DE GAZ D'ÉCHAPPEMENT

Publication  
**EP 1957184 A1 20080820 (DE)**

Application  
**EP 06817731 A 20061201**

Priority  
• CH 2006000679 W 20061201  
• CH 19192005 A 20051205

Abstract (en)  
[origin: WO2007065284A1] This catalytically active or inactive diffuser is suitable for exhaust gas cleaning systems of internal combustion engines. It consists of a ceramic structure (8) which is obtained from a ceramized polyurethane foam. This ceramic structure (8) can be coated with surface area-increasing and/or oxygen-storing materials and/or noble metals in order to bring about a catalytic action with the gas molecules flowing through it. Because the diffuser is porous in every direction in its interior, a gas and its pressure can spread out equally on all sides through the entire diffuser volume. A virtually homogeneous velocity distribution arises over the entire flow cross section, and increased turbulence is obtained, which leads to more wall contacts of the harmful substance molecules. At the same time, the flow to and through downstream systems over their cross sections with homogeneously mixed exhaust gas including any reactants metered in is more uniform. Overall, it is possible with such a diffuser to produce an exhaust gas cleaning system in a less expensive and more compact manner with the same efficiency.

IPC 8 full level  
**B01D 53/94** (2006.01); **B01J 35/00** (2006.01); **B01J 37/00** (2006.01); **C04B 38/04** (2006.01); **F01N 3/28** (2006.01)

CPC (source: EP US)  
**B01D 53/945** (2013.01 - EP US); **B01D 53/9454** (2013.01 - EP US); **B01J 35/56** (2024.01 - EP US); **B01J 37/0215** (2013.01 - EP US); **C04B 38/0615** (2013.01 - EP US); **F01N 3/2825** (2013.01 - EP US); **F01N 3/2892** (2013.01 - EP US); **F15D 1/001** (2013.01 - EP US); **B01D 2255/402** (2013.01 - EP US); **B01D 2255/908** (2013.01 - EP US); **B01D 2255/9207** (2013.01 - EP US); **C04B 2111/00793** (2013.01 - EP US); **C04B 2111/0081** (2013.01 - EP US); **F01N 2240/20** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)  
See references of WO 2007065284A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2007065284 A1 20070614**; EP 1957184 A1 20080820; US 2009139400 A1 20090604

DOCDB simple family (application)  
**CH 2006000679 W 20061201**; EP 06817731 A 20061201; US 8598106 A 20061201