

Title (en)  
Exhaust gas diffuser

Title (de)  
Abgasdiffusor

Title (fr)  
Diffuseur de gaz d'échappement

Publication  
**EP 1770249 A1 20070404 (EN)**

Application  
**EP 05394027 A 20050928**

Priority  
EP 05394027 A 20050928

Abstract (en)  
An exhaust gas diffuser (1) is provided comprising an elongate exhaust gas cylinder (3) with a gas inlet (5) and gas outlet (7) and a primary vortex inducer (9) within the exhaust gas cylinder (3) which transforms the laminar flow of the exhaust gas passing through the exhaust cylinder (3) into a turbulent spinning vortex flow. The diffuser (1) further includes means to provide a flow of ambient temperature atmospheric air from external the exhaust gas cylinder (3) to a position internal the exhaust gas cylinder (3). The flow of ambient temperature atmospheric air mixes with the spinning vortex flow of exhaust gases prior to their release from the gas outlet (7). This serves to cool the exhaust gases significantly and ensures the gases are dispersed in a less concentrated form from the diffuser.

IPC 8 full level  
**F01N 1/12** (2006.01); **F01N 13/08** (2010.01)

CPC (source: EP)  
**F01N 1/12** (2013.01); **F01N 13/082** (2013.01); **F01N 2270/02** (2013.01); **F01N 2270/10** (2013.01)

Citation (applicant)

- EP 0526673 A1 19930210 - YU CHUEN YUAN [TW]
- US 5971097 A 19991026 - ETHEVE PIERRE [FR]
- US 2913871 A 19591124 - HAROLD BRADSHAW NORMAN
- US 2829731 A 19580408 - WILLIAM CLAYTON

Citation (search report)

- [X] EP 0526673 A1 19930210 - YU CHUEN YUAN [TW]
- [X] US 5971097 A 19991026 - ETHEVE PIERRE [FR]
- [X] US 2913871 A 19591124 - HAROLD BRADSHAW NORMAN
- [X] US 2829731 A 19580408 - WILLIAM CLAYTON
- [A] DE 19929244 A1 20001228 - VOLKSWAGEN AG [DE]

Cited by  
CN103635668A; US10001048B2; DE102016213381A1; DE202008013253U1; CN107246309A; US8556014B2; US8479498B2; WO2018015358A1; US9206729B2; US7779961B2; US8869516B2; WO2009112888A1

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

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1770249 A1 20070404; EP 1770249 B1 20091202**; AT E450697 T1 20091215; DE 602005018060 D1 20100114

DOCDB simple family (application)  
**EP 05394027 A 20050928**; AT 05394027 T 20050928; DE 602005018060 T 20050928