

Title (en)  
Exhaust outlet with venturi.

Title (de)  
Auspuffanlage mit Venturi.

Title (fr)  
Sortie d'échappement à venturi.

Publication  
**EP 0434578 A1 19910626 (FR)**

Application  
**EP 90420545 A 19901213**

Priority  
FR 8917206 A 19891220

Abstract (en)  
The exhaust outlet according to the invention comprises an upstream section (18) in the shape of a venturi, limited by convergent upstream walls (16) having an open angle and connecting, in a narrowed section (15), with divergent downstream walls (17) having a more reduced angle, and a downstream cylindrical portion (3) continuously connected to the downstream walls (17) of the upstream portion (18). The presence of the upstream portion (18) in the shape of a venturi allows a substantial reduction in exhaust noise without significantly affecting the power available from the engine. <IMAGE>

Abstract (fr)  
La sortie d'échappement selon l'invention comprend une portion amont (18) en forme de venturi, limitée par des parois amont (16) convergentes à angle ouvert se raccordant, dans une partie rétrécie (15) à des parois aval (17) divergentes à angle plus réduit, et une portion aval cylindrique (3) raccordée de manière continue aux parois aval (17) de portion amont (18). La présence de la portion amont (18) en forme de venturi permet de diminuer sensiblement le bruit de ravalement, sans affecter de manière sensible la puissance disponible du moteur. <IMAGE>

IPC 1-7  
**F01N 1/08; F01N 7/08; F01N 7/20**

IPC 8 full level  
**F01N 1/08** (2006.01); **F01N 3/02** (2006.01); **F01N 3/34** (2006.01); **F01N 13/08** (2010.01); **F01N 13/20** (2010.01)

CPC (source: EP US)  
**F01N 1/08** (2013.01 - EP US); **F01N 13/082** (2013.01 - EP US); **F01N 13/20** (2013.01 - EP US)

Citation (search report)

- [AD] WO 8905394 A1 19890615 - CATERPILLAR INC [US]
- [A] FR 606040 A 19260605
- [AP] WO 9004706 A1 19900503 - DONALDSON CO INC [US]
- [A] FR 646606 A 19281114
- [A] US 4690245 A 19870901 - GREGORICH EDWARD E [US], et al
- [A] GB 765639 A 19570109 - MARCEAU PAUL HENRI THERESE
- [A] GB 986576 A 19650317 - GRUENZWEIG & HARTMANN
- [A] FR 837061 A 19390202
- [A] FR 2467974 A1 19810430 - LETANG ET REMY SA [FR]
- [A] GB 2054779 A 19810218 - DEERE & CO
- [A] FR 746282 A 19330526 - DAIMLER BENZ AG
- [A] US 1654078 A 19271227 - WARD HALL CHARLES

Designated contracting state (EPC)  
AT DE ES FR GB IT

DOCDB simple family (publication)  
**EP 0434578 A1 19910626**; DE 434578 T1 19911128; ES 2023619 A4 19920201; FR 2656038 A1 19910621; JP H03290013 A 19911219; PT 96244 A 19910930; US 5174113 A 19921229

DOCDB simple family (application)  
**EP 90420545 A 19901213**; DE 90420545 T 19901213; ES 90420545 T 19901213; FR 8917206 A 19891220; JP 40390390 A 19901219; PT 9624490 A 19901218; US 62543790 A 19901211