

Title (en)

CONVOLUTED PLATE WITH VORTEX GENERATOR

Publication

EP 0321379 A3 19910710 (EN)

Application

EP 88630118 A 19880630

Priority

US 13239587 A 19871215

Abstract (en)

[origin: EP0321379A2] A thin, convoluted wall member (314) disposed upstream of the inlet (312) of a diffuser (304) generates large-scale vortices (322) having axes in the downstream direction. The vortices (322) enhance mixing within the diffuser (304) and can also energize the boundary layer, thereby improving diffuser performance and delaying the onset of stall. Greater diffusion angles without stall are possible. The member (314) itself creates low losses.

IPC 1-7

F15D 1/00; **F01N 3/28**

IPC 8 full level

F15D 1/02 (2006.01); **B01D 53/86** (2006.01); **B01F 5/06** (2006.01); **B01J 8/02** (2006.01); **F01N 3/28** (2006.01); **F15D 1/00** (2006.01); **F28F 13/06** (2006.01); **B01F 5/00** (2006.01)

CPC (source: EP KR)

B01F 25/4322 (2022.01 - EP); **F01N 3/2892** (2013.01 - EP); **F15D 1/00** (2013.01 - KR); **F15D 1/0015** (2013.01 - EP); **F28F 13/06** (2013.01 - EP); **B01F 2025/913** (2022.01 - EP)

Citation (search report)

- [A] WO 8703646 A1 19870618 - SAAB SCANIA AB [SE]
- [A] DE 2843365 A1 19800424 - DAIMLER BENZ AG
- [A] US 3953176 A 19760427 - SANTALA TEUVO J, et al
- [A] US 3870772 A 19750311 - RANDALL DAVID I, et al
- [A] US 3827461 A 19740806 - GILMAN F

Cited by

EP0410924A3; EP0585194A1; US5918465A; US5230369A; EP0493302A1; RU2692058C1; US5327940A; US2012128540A1; US9132391B2; EP0439226A1; EP2522911A1; EP2522912A1; EP0926356A3; EP0999367A1; US2011135541A1; DE102012221342A1; US8840843B2; US8938971B2; US6216644B1; WO9623981A1; US9347663B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0321379 A2 19890621; **EP 0321379 A3 19910710**; **EP 0321379 B1 19950329**; DE 321379 T1 19891207; DE 3853466 D1 19950504; DE 3853466 T2 19950803; JP 2678466 B2 19971117; JP H01172603 A 19890707; KR 890010477 A 19890809; KR 960013199 B1 19960930; YU 111888 A 19901231

DOCDB simple family (application)

EP 88630118 A 19880630; DE 3853466 T 19880630; DE 88630118 T 19880630; JP 16406988 A 19880630; KR 880008196 A 19880630; YU 111888 A 19880609