

Title (en)
DIFFUSER WITHOUT PULSATION OF THE IMPACT INTERFACE AND METHOD FOR SUPPRESSING IMPACT INTERFACE PULSATION OF DIFFUSERS

Title (de)
DIFFUSOR OHNE PULSATION DER STOSS-GRENZSCHICHT UND VERFAHREN ZUM UNTERDRÜCKEN DER STOSS-GRENZSCHICHT-PULSATION VON DIFFUSOREN

Title (fr)
DIFFUSEUR SANS PULSATIONS DE L'INTERFACE D'IMPACT, ET PROCEDE POUR EMPECHER LES PULSATIONS DE L'INTERFACE D'IMPACT DE DIFFUSEURS

Publication
EP 1153219 B1 20030820 (DE)

Application
EP 00907578 A 20000215

Priority
• DE 19905994 A 19990215
• EP 0001300 W 20000215

Abstract (en)
[origin: US2002018714A1] A diffuser for slowing down a fluid and a method for operating a diffuser is described. A channel of the diffuser has an inlet with a smaller flow cross section than a flow cross section of an outlet and at least one opening for receiving an energizing fluid to be transported selectively into the channel. Pulsations of the impact interface are suppressed effectively at all of the operating points by injecting the energization fluid. Pressures of the fluid moving in the diffuser are measured, and amplitudes and frequencies of the measured pressures are evaluated. Energizing fluid is fed into the diffuser if the amplitudes within a predetermined frequency band exceed a threshold value. The utilization ratio of the inventive diffuser is considerably improved as a result of such a measure.

IPC 1-7
F04D 29/68

IPC 8 full level
F01D 25/04 (2006.01); **F01D 25/30** (2006.01); **F04D 29/68** (2006.01)

CPC (source: EP US)
F01D 25/04 (2013.01 - EP US); **F01D 25/30** (2013.01 - EP US); **F05D 2250/191** (2013.01 - EP US); **Y10S 415/914** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
US 2002018714 A1 20020214; US 6602046 B2 20030805; AT E247783 T1 20030915; AU 2912100 A 20000904; DE 19905994 A1 20000824; DE 50003355 D1 20030925; EP 1153219 A1 20011114; EP 1153219 B1 20030820; WO 0049297 A1 20000824; WO 0049297 B1 20010525

DOCDB simple family (application)
US 93040401 A 20010815; AT 00907578 T 20000215; AU 2912100 A 20000215; DE 19905994 A 19990215; DE 50003355 T 20000215; EP 0001300 W 20000215; EP 00907578 A 20000215