

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

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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.

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