Title (en)

Diffusor for a turbomachine

Title (de)

Diffusor für Turbomaschine

Title (fr)

Diffuseur pour une turbomachine

Publication

EP 0690206 B1 20000301 (DE)

Application

EP 95810378 A 19950608

Priority

DE 4422700 A 19940629

Abstract (en)

[origin: EP0690206A2] The deflection angles (aN,aZ) at the diffuser inlet, both at the hub and at the cylinder of the turbine, are set solely so as to give an even pressure gradient over the passage height at the outlet from the last row of blades (7A). Flow-guiding ribs are provided inside the retardation zone of the diffuser, so as to suppress turbulence, and the diffuser is divided by a guide plate. The diffuser has an axial inlet and a radial outlet, and is divided between them by the plate (60), which curves radially in the outwards direction, into inner and outer passages (50,51). In the outer passage, flow through the ribs takes place in the radial direction, and in the inner one in the diagonal direction. To avoid interference with the last row of blades, in the inner passage the ratio of the distance of the ribs (a) from the blade outlet to the rib pitch can be 0.5:1. <IMAGE>

IPC 1-7

F01D 25/30

IPC 8 full level

F01D 25/30 (2006.01)

CPC (source: EP US)

F01D 25/30 (2013.01 - EP US); F05D 2250/71 (2013.01 - EP US)

Cited by

EP3147458A1; DE10255389A1; EP2295732A1; US8506233B2; DE102010044819B4

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DE FR GB IT

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 95810378 A 19950608; CN 95107646 A 19950626; DE 4422700 A 19940629; DE 59507868 T 19950608; JP 16259895 A 19950628; US 47393895 A 19950607; US 70707296 A 19960903