

Title (en)
AXIAL TURBINE

Publication
EP 0265633 B1 19910206 (DE)

Application
EP 87112769 A 19870902

Priority
CH 387686 A 19860926

Abstract (en)
[origin: US4802821A] In an axial flow gas turbine with reaction blading, whose outlet rotor blades (14) are followed by a diffuser with axial outlet into an exhaust gas pipe (13), the kink angles of the diffuser inlet both at the hub (10) and at the cylinder (9) are fixed exclusively for the purpose of evening out the energy profile over the duct height at the outlet from the last rotor blade row in order to shorten the diffuser system and to optimise it in part load operation. In addition, a mechanism provided to remove swirl from the swirling flow in the form of profile ribs (17). Where the outlet rotor blades have a high Mach number flow, which leads to a large opening angle of the blading, the diffuser is subdivided into several partial diffusers (16) via sheet metal guides (15).

IPC 1-7
F01D 25/30

IPC 8 full level
F02C 7/00 (2006.01); **F01D 25/30** (2006.01)

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

Cited by
DE102011118735A1; US5588799A; US5707208A; EP3159501A1; EP0581978A1; US5338155A; EP0417433A1; US5102298A; US6533546B2; WO2017067774A1; WO2014175763A1; EP2594741A2

Designated contracting state (EPC)
CH DE GB LI NL

DOCDB simple family (publication)
EP 0265633 A1 19880504; EP 0265633 B1 19910206; AU 603136 B2 19901108; AU 7880287 A 19880331; CH 672004 A5 19891013; DE 3767965 D1 19910314; JP 2820403 B2 19981105; JP S6390630 A 19880421; US 4802821 A 19890207

DOCDB simple family (application)
EP 87112769 A 19870902; AU 7880287 A 19870921; CH 387686 A 19860926; DE 3767965 T 19870902; JP 23910587 A 19870925; US 9902087 A 19870921