

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

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