

Title (en)

Axial turbomachine with variable guide vanes

Title (de)

Axialströmungsmaschine mit einem eine Reihe von verstellbaren Leitschaufeln umfassenden Leitapparat

Title (fr)

Turbomachine axiale avec des aubes de guidage variables

Publication

EP 1143111 A3 20030507 (DE)

Application

EP 01108009 A 20010329

Priority

DE 10016745 A 20000404

Abstract (en)

[origin: US2001026758A1] In order to make the components of a guide apparatus for an axial flow turbine easy to activate and also to permit only small gap flows, an axial flow machine is proposed with a guide apparatus, which comprises a row of adjustable guide vanes in the flow duct, which flow duct is bounded, on the one hand, by an inner spherically configured hub and, on the other hand, by an outer spherically configured guide vane carrier, the guide vanes being, on the one hand, rotationally supported in radial bearing holes of the annular guide vane carrier and, on the other hand, the spherically configured tip and root profiles of the guide vanes sealing against the guide vane carrier and the hub, in which arrangement the hub is embodied with a flexible hub contour at least in the sealing region of the inner tips of the guide vanes and the support for the guide vanes in the direction of the guide vane axes (A) is likewise designed to be flexible.

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IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

- [XY] US 2651496 A 19530908 - BUCKLAND BRUCE O, et al
- [XY] GB 878988 A 19611004 - MASCHF AUGSBURG NUERNBERG AG
- [Y] US 3999883 A 19761228 - NORDENSON GARY E
- [A] US 4385864 A 19830531 - ZACHERL ANTON [DE]

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