

Title (en)
TURBO MACHINE

Publication
EP 0204033 B1 19880615 (DE)

Application
EP 85116447 A 19851221

Priority
DE 3516738 A 19850509

Abstract (en)
[origin: US4702672A] A fluid flow machine of the radial type of construction with adjustable guide blades in a radially extending annular channel of the fluid flow housing. The bearing support of the guide blades takes place in a guide blade carrier that represents a one-piece bearing cage with lateral flow surfaces for the guide blades. The guide blade carrier is composed of two bearing rings which are combined into one structural unit by way of fixed connecting webs disposed in the flow path. In this structural unit, the space for the guide blades can be machined very accurately in its axial width to maintain the tolerances which means small gap losses and correspondingly favorable efficiencies. Since the guide blade carrier is so arranged in the housing that expansions of the housing by reason of heat or pressure warping are not transmitted, the gap tolerances can be selected correspondingly still smaller, and the efficiency can be still further improved. It is also significant that the fluid flow machine and its components can be constructed particularly simple from a constructive point of view and particularly reliable in operation by means of the housing-independent bearing support of the guide blades in the guide blade carrier.

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IPC 8 full level
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CPC (source: EP US)
F01D 9/045 (2013.01 - EP US); **F01D 17/165** (2013.01 - EP US)

Cited by
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