

Title (en)
TURBINE AND METHOD FOR EXPANDING AN OPERATING FLUID

Title (de)
TURBINE UND VERFAHREN ZUR ERWEITERUNG EINES BETRIEBSMITTELS

Title (fr)
TURBINE ET PROCÉDÉ D'EXPANSION D'UN FLUIDE DE TRAVAIL

Publication
EP 3155225 A1 20170419 (EN)

Application
EP 15726328 A 20150422

Priority
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Abstract (en)
[origin: WO2015189718A1] A turbine (1), at least partially centrifugal, for the expansion of a compressible operating fluid, for example gas or steam. At least one group of stages (5), named centrifugal stages, extends in a radial direction with respect to the axis X-X to carry out the centrifugal expansion of the operating fluid. Advantageously, the turbine comprises a group of stages, named centripetal stages (4), extending in a radial direction to carry out a first expansion of the operating fluid centripetally in the radial direction. Moreover, all the arrays of rotor blades are constrained to the shaft (2) at an end thereof, anyway not in the area between the bearings (9), i.e. according to a so-called "cantilevered" configuration and particularly advantageous to carry out maintenance operations. The proposed solution allows high efficiencies to be achieved by a compact turbine. A corresponding method for expanding the operating fluid is further described.

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Citation (search report)
See references of WO 2015189718A1

Cited by
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