

Title (en)

APPARATUS FOR THE AUTOMATIC CONTROL OF THE PLAY OF A LABYRINTH SEAL OF A TURBO MACHINE

Publication

EP 0177408 B1 19880824 (FR)

Application

EP 85401863 A 19850925

Priority

FR 8414818 A 19840927

Abstract (en)

[origin: US4668163A] An assembly to control automatically the clearance of a labyrinth seal of the turbo machine, including a stator member is provided which includes an annular chamber supplied with a hot air flow through orifices and a colder air flow supplied through apertures formed in the radially inner part of the stator member constituting the annular carrier of a wear seal member which forms with tips carried by the one part of the rotor the labyrinth seal, these apertures being disposed upstream of the seal. The apertures lie in the zone of corresponding parts of the carrier and of the rotor part which are so shaped as to create a annular convergent-divergent annular nozzle forming a throat. The clearance of the seal is maintained constant due to relative variations effected in the air flows and, in the sense of heating up in the case of a reduction of clearance and in the sense of cooling down in the case of an increase in clearance.

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CPC (source: EP US)

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