

Title (en)
BOUNDARY LAYER TURBOMACHINE AND CORRESPONDING OPERATING METHOD

Title (de)
GRENZSCHICHT-TURBOMASCHINE UND ZUGEHÖRIGES BETRIEBSVERFAHREN

Title (fr)
TURBOMACHINE À COUCHE LIMITE ET PROCÉDÉ DE FONCTIONNEMENT ASSOCIÉ

Publication
EP 3103961 B1 20191106 (EN)

Application
EP 15171530 A 20150610

Priority
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Abstract (en)
[origin: EP3103961A1] A boundary layer turbomachine is disclosed and described. The boundary layer turbomachine can include a housing defining an interior space and having an inlet opening and an outlet opening to facilitate movement of a fluid through the housing. The boundary layer turbomachine can also include partition circumferentially dividing the interior space into an outer chamber and a rotor chamber located radially inward of the outer chamber. The partition can have partition openings such that fluid is movable through the partition between the outer chamber and the rotor chamber. Additionally, the boundary layer turbomachine can include a rotor assembly disposed in the rotor chamber and configured to rotate about an axis of rotation. The rotor assembly can have a plurality of disks spaced apart along the axis of rotation and defining an interior opening along the axis of rotation. The fluid can pass through gaps between the disks and the interior opening as the fluid moves through the housing. A corresponding method of operating the boundary layer turbomachine is also provided.

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