

Title (en)

AXIAL TURBOMACHINE STATOR AND CORRESPONDING TURBOMACHINE

Title (de)

STATOR EINER AXIALEN STRÖMUNGSMASCHINE UND ZUGEHÖRIGE STRÖMUNGSMASCHINE

Title (fr)

STATOR DE TURBOMACHINE AXIALE ET TURBOMACHINE ASSOCIÉE

Publication

EP 2977559 A1 20160127 (FR)

Application

EP 14178502 A 20140725

Priority

EP 14178502 A 20140725

Abstract (en)

[origin: CA2897889A1] A stator of an axial turbomachine compressor has a circular wall, such as an internal shroud, with a guiding surface in order to guide the primary flow of the turbomachine. The stator further includes a circular row of stator blades, each of them has a vane which extends radially in the primary flow of the turbomachine, and a securing portion. The securing portion of the blade includes a lattice which has rods and which is secured and/or sealed in the shroud in order to fix the blades to the shroud via the latticees. The stator includes a joint of abradable material which is arranged inside the internal shroud, and in which the lattice is secured in order to ensure retention, a fixing between the blade and the internal shroud. The blade is produced by means of additive production.

Abstract (fr)

L'invention a trait à un stator (28) de compresseur de turbomachine axiale. Le stator (28) comprend une paroi circulaire (34), telle une virole interne (34), avec une surface de guidage (54) pour guider le flux primaire (18) de la turbomachine. Le stator inclut par ailleurs une rangée circulaire d'aubes statoriques (26), chacune d'elle comprend une pale (40) s'étendant radialement dans le flux primaire (18) de la turbomachine, et une portion d'ancrage (42). La portion d'ancrage (42) de l'aube comprend un treillis (36) avec des tiges, ancré et/ou scellé dans la virole (34) de sorte à fixer les aubes (26) à la virole via les treillis (36). Le stator (28) comprend un joint (38) en matériau abradable disposé à l'intérieur de la virole interne (34), et dans lequel est ancré le treillis (36) de sorte à assurer une rétention, une fixation entre l'aube (26) et la virole interne (34). L'aube est réalisée par fabrication additive.

IPC 8 full level

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CPC (source: EP US)

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F04D 29/102 (2013.01 - EP US); **F04D 29/542** (2013.01 - EP US); **F04D 29/644** (2013.01 - US)

Citation (applicant)

EP 2735707 A1 20140528 - TECHSPACE AERO SA [BE]

Citation (search report)

- [AD] EP 2735707 A1 20140528 - TECHSPACE AERO SA [BE]
- [A] EP 2418387 A1 20120215 - TECHSPACE AERO SA [BE]

Cited by

EP3351320A3; US10830071B2; US11766722B2

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