

Title (en)
INTERNAL FERRULE OF AN AXIAL TURBINE-ENGINE COMPRESSOR

Title (de)
STATOR-INNENRING EINES KOMPRESSORS EINES AXIALEN TURBOTRIEBWERKS

Title (fr)
VIROLE INTERNE DE COMPRESSEUR DE TURBOMACHINE AXIALE

Publication
EP 3351736 A1 20180725 (FR)

Application
EP 18159641 A 20151022

Priority
• BE 201400820 A 20141118
• EP 15190957 A 20151022

Abstract (en)
[origin: CA2909256A1] A segmented internal shroud of a low-pressure compressor for an axial-flow turbomachine has an axial tubular wall, and a row of apertures formed in the axial wall. Each aperture has opposing edges situated to either side of a stator blade positioned in the aperture for the purpose of its attachment. The axial wall includes a radial flange which passes through the apertures in the circumferential direction of the shroud, so as to form a mechanical link between the opposing edges of the apertures. This mechanical seal permits the opposing edges to be joined together through each aperture, which may help improve the rigidity and the sealing. The shroud exhibits an E-shaped profile forming a sandwich structure with the annular sealing ribs of the rotor, or sealing lips. A method for the assembly of stator blades includes positioning the blade in radial abutment against the transverse radial flange.

Abstract (fr)
L'invention a trait à une virole interne (28) segmentée de compresseur basse pression de turbomachine axiale. La virole comprend : une paroi (32) circulaire ou semi-circulaire dont le profil s'étend principalement axialement, et au moins une bride radiale (38, 40, 42) circulaire ou semi circulaire s'étendant radialement depuis la paroi (32) vers l'intérieur. De plus, la ou chaque bride (38, 40, 42) présente au moins une surface circulaire ou semi-circulaire dont le profil s'étend principalement radialement, ladite surface présentant des aspérités (48).

IPC 8 full level
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CPC (source: EP RU US)
F01D 9/041 (2013.01 - RU US); **F01D 9/042** (2013.01 - EP RU US); **F01D 9/06** (2013.01 - US); **F01D 11/001** (2013.01 - EP RU US); **F01D 11/122** (2013.01 - RU US); **F04D 29/164** (2013.01 - EP); **F05D 2220/30** (2013.01 - US); **F05D 2240/11** (2013.01 - US); **F05D 2240/12** (2013.01 - US); **F05D 2300/40** (2013.01 - EP US); **F05D 2300/603** (2013.01 - US)

Citation (search report)
• [A] EP 1419849 A1 20040519 - GEN ELECTRIC [US]
• [A] US 2006013685 A1 20060119 - ELLIS CHARLES A [US], et al
• [A] EP 1227218 A2 20020731 - GEN ELECTRIC [US]

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 3023595 A1 20160525; EP 3023595 B1 20180418; BE 1022513 B1 20160519; CA 2909256 A1 20160518; CN 105604612 A 20160525; CN 105604612 B 20180828; EP 3351736 A1 20180725; EP 3351736 B1 20200129; RU 2015146074 A 20170516; RU 2015146074 A3 20190520; RU 2719521 C2 20200421; US 10113439 B2 20181030; US 2016138413 A1 20160519

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