

Title (en)
TURBINE RING ASSEMBLY, ELASTICALLY RETAINED IN A COLD-STATE

Title (de)
IN EINEM KALTZUSTAND ELASTISCH GEHALTENE TURBINENRINGANORDNUNG

Title (fr)
ENSEMBLE D'ANNEAU DE TURBINE AVEC MAINTIEN ÉLASTIQUE A FROID.

Publication
EP 3390782 B1 20191127 (FR)

Application
EP 16825829 A 20161212

Priority
• FR 1562745 A 20151218
• FR 2016053343 W 20161212

Abstract (en)
[origin: WO2017103411A2] A turbine ring assembly comprises a plurality of ring sectors (10) made of a ceramic matrix composite material, forming a turbine ring (1), and a ring support structure (3) having first and second annular flanges (32, 36), each ring sector having tabs (14, 16). The first tab (14) of each ring sector (10) has an annular groove (140) which receives an annular projection (34) of the first flange (32), a clearance (J1) being present in a cold state between the annular projection (34) and the annular groove (140). The second tab (16) of each ring sector (10) is connected to the ring support structure (3) via an elastic retaining element (50). The second tab (16) of each ring sector (10) comprises at least one opening (17) which receives a portion of a retaining element (40) rigidly connected with the second annular flange (36) of the ring support structure (3), a clearance (J2) being present in a cold state between the opening (17) of the second tab (16) and the portion of the retaining element (40) present in said opening, said retaining element being composed of a material with a greater coefficient of thermal expansion than the coefficient of thermal expansion of the ceramic matrix composite material forming the ring sectors.

IPC 8 full level
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CPC (source: EP US)
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