

Title (en)
CLEARANCE CONTROL ARRANGEMENT AND CORRESPONDING GAS TURBINE ENGINE

Title (de)
ABSTANDSREGELUNGSANORDNUNG UND ZUGEHÖRIGES GASTURBINENTRIEBWERK

Title (fr)
AGENCEMENT DE CONTRÔLE DU JEU ET MOTEUR Á TURBINE Á GAZ ASSOCIÉ

Publication
EP 3409900 A1 20181205 (EN)

Application
EP 18171196 A 20180508

Priority
GB 201708744 A 20170601

Abstract (en)
A clearance control arrangement (26) for a rotor (28), the arrangement comprising a rotor and a casing (32) radially outside the rotor. An annular array of segment assemblies (33) mounted to the casing and radially spaced from the rotor by a clearance (42). Each segment assembly comprising a heat transfer cavity (48) radially adjacent to the casing. A birdmouth cavity (66) towards the rear of the segment assembly. A bypass hole (68) configured to deliver air to the birdmouth cavity to reduce the amount of air which leaks from the heat transfer cavity to the birdmouth cavity. A corresponding gas turbine engine is also provided.

IPC 8 full level
F01D 11/00 (2006.01); **F01D 11/10** (2006.01); **F01D 11/24** (2006.01); **F01D 25/24** (2006.01)

CPC (source: EP US)
F01D 11/005 (2013.01 - EP US); **F01D 11/10** (2013.01 - EP US); **F01D 11/24** (2013.01 - EP US); **F01D 25/14** (2013.01 - US); **F01D 25/246** (2013.01 - EP US); **F04D 29/526** (2013.01 - US); **F05D 2240/11** (2013.01 - EP US); **F05D 2240/14** (2013.01 - US); **F05D 2240/55** (2013.01 - US); **F05D 2260/201** (2013.01 - US)

Citation (search report)
• [XAY] GB 2539782 A 20161228 - ROLLS ROYCE PLC [GB]
• [Y] US 6666645 B1 20031223 - ARILLA JEAN-BAPTISTE [FR], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3409900 A1 20181205; GB 201708744 D0 20170719; US 2018347391 A1 20181206

DOCDB simple family (application)
EP 18171196 A 20180508; GB 201708744 A 20170601; US 201815995525 A 20180601