

Title (en)

DAMPER RING FOR A ROTOR STAGE

Title (de)

DÄMPFUNGSRING FÜR EINE ROTORSTUFE

Title (fr)

ANNEAU D'AMORTISSEMENT POUR UN ÉTAGE DE ROTOR

Publication

**EP 3081750 A1 20161019 (EN)**

Application

**EP 16160340 A 20160315**

Priority

GB 201506195 A 20150413

Abstract (en)

A rotor stage (100) of a gas turbine engine (10) comprises a platform (120) from which rotor blades extend. The platform is provided with a circumferentially extending damper ring (200), the damper ring having an engagement surface (210) that engages with the platform. The damper ring has a cross-sectional shape perpendicular to the circumferential direction that has a depth (a) in the radial direction, and a neutral bending axis (250) that is spaced (b) from the engagement surface by more than half of the depth. Increasing the spacing between the engagement surface and the neutral bending axis increases the amount of slip at the interface between the damper ring and the platform, thereby increasing the amount of frictional damping.

IPC 8 full level

**F01D 5/10** (2006.01)

CPC (source: EP US)

**F01D 5/10** (2013.01 - EP US); **F05D 2240/80** (2013.01 - EP US); **F05D 2250/13** (2013.01 - EP US); **F05D 2250/75** (2013.01 - EP US);  
**F05D 2260/96** (2013.01 - EP US)

Citation (search report)

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- [XY] EP 1074762 A2 20010207 - GEN ELECTRIC [US]
- [XY] WO 2008041889 A1 20080410 - VOLVO AERO CORP [SE], et al
- [XY] JP 2009197649 A 20090903 - MITSUBISHI HEAVY IND LTD
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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

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