

Title (en)

DAMPER FOR A COMBUSTOR ASSEMBLY OF A GAS TURBINE ASSEMBLY, COMBUSTOR ASSEMBLY COMPRISING SAID DAMPER AND METHOD FOR MANUFACTURING A DAMPER FOR A COMBUSTOR ASSEMBLY

Title (de)

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Title (fr)

AMORTISSEUR POUR ENSEMBLE DE CHAMBRE DE COMBUSTION D'UN ENSEMBLE DE TURBINE À GAZ, ENSEMBLE DE CHAMBRE DE COMBUSTION COMPORTANT LEDIT AMORTISSEUR ET PROCÉDÉ DE FABRICATION D'UN AMORTISSEUR POUR UN ENSEMBLE DE CHAMBRE DE COMBUSTION

Publication

EP 3760925 A1 20210106 (EN)

Application

EP 19183732 A 20190701

Priority

EP 19183732 A 20190701

Abstract (en)

A damper for a combustor assembly (3) of a gas turbine assembly (1) is provided with: at least two damping volumes (32, 35) defined by respective damping bodies (31, 34); the damping volumes (32, 35) being interconnected in fluidic communication; at least one perforated connecting plate (36) connecting the two damping volumes (32, 35); at least one perforated end plate (38) configured to connect at least one of the two damping volumes (32, 35) with a combustion chamber (16; 14) of the combustor assembly (3); the perforated connecting plate (36) and the perforated end plate (38) being provided with a plurality of openings (42); the openings (42) being dimensioned so as to operate in a low Strouhal regime according to the following formula $\omega \cdot R_H / U_b < 0,5$ wherein: ω is the angular frequency correlated to the frequency to damp according to the following relation $\omega = 2\pi f$; $R_{H/sub} < H_{/sub} >$ is the equivalent radius of one of the openings (42); $U_{b/sub} < b_{/sub} >$ is the velocity of the flow through one of the openings (42).

IPC 8 full level

F23M 20/00 (2014.01)

CPC (source: CN EP)

F23M 20/005 (2015.01 - EP); **F23R 3/04** (2013.01 - CN); **F23R 3/42** (2013.01 - CN); **F23R 2900/00014** (2013.01 - EP)

Citation (search report)

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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

DOCDB simple family (publication)

EP 3760925 A1 20210106; CN 112178695 A 20210105

DOCDB simple family (application)

EP 19183732 A 20190701; CN 202010619065 A 20200701