

## 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)

DÄMPFER FÜR EINE BRENNKAMMERANORDNUNG EINER GASTURBINENBAUGRUPPE, BRENNKAMMERANORDNUNG MIT BESAGTEM DÄMPFER UND VERFAHREN ZUR HERSTELLUNG EINES DÄMPFERS FÜR BRENNKAMMERANORDNUNG

## 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:  $\omega$  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)

- [X] US 2018313540 A1 20181101 - NAGARAJA SHARATH BANGALORE [US], et al
- [X] US 2011179795 A1 20110728 - JOHNSON THOMAS EDWARD [US], et al
- [X] US 2015159870 A1 20150611 - HUBER ANDREAS [CH], et al
- [X] EP 2397759 A1 20111221 - ALSTOM TECHNOLOGY LTD [CH]
- [A] DE 19640980 A1 19980416 - ASEA BROWN BOVERI [CH]

## 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