

Title (en)

ACOUSTIC DAMPING SYSTEM FOR A COMBUSTOR OF A GAS TURBINE ENGINE

Title (de)

SYSTEM ZUR AKUSTISCHEN DÄMPFUNG FÜR EINEN VERBRENNER EINES GASTURBINENMOTORS

Title (fr)

SYSTÈME D'AMORTISSEMENT ACOUSTIQUE POUR CHAMBRE DE COMBUSTION DE TURBINE À GAZ

Publication

**EP 3189274 A1 20170712 (EN)**

Application

**EP 14767241 A 20140905**

Priority

US 2014054176 W 20140905

Abstract (en)

[origin: WO2016036379A1] An acoustically dampened gas turbine engine having a gas turbine engine combustor (12) with an acoustic damping resonator system is disclosed. The acoustic damping resonator system (14) may be formed from one or more resonators (16) formed from a resonator housing (18) positioned within the gas turbine engine combustor (12) at an outer housing (20) forming a combustor basket (22) and extending circumferentially within the combustor (12). In at least one embodiment, the resonator housing (18) may include one or more resonator chambers that provide enhanced cooling with reduced risk of cracking and other damage. The resonator housing (18) may include resonator exhaust orifices (26) that are positioned closer to an area of maximum temperature within the combustor (12), thereby enabling the resonator (16) to reduce the temperature gradient within the combustor (12). The resonator housing (18) may be sized and configured to reduce stress found in conventional systems by increasing distances between resonator exhaust orifices (26) and between resonator inlet impingement orifices (30), among others.

IPC 8 full level

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CPC (source: EP US)

**F23M 20/005** (2015.01 - EP US); **F23R 3/002** (2013.01 - EP US); **F23R 2900/00014** (2013.01 - EP US); **F23R 2900/03044** (2013.01 - EP US)

Citation (search report)

See references of WO 2016036379A1

Cited by

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