

Title (en)

Trapped vortex combustor cavity manifold for gas turbine engine

Title (de)

Gasturbinenbrennkammer mit Hohlraum zur Erzeugung eingeschlossener Wirbel

Title (fr)

Chambre de combustion de turbine à gaz avec cavité pour la création de vortex piégés

Publication

EP 1659338 A1 20060524 (EN)

Application

EP 05254296 A 20050708

Priority

US 99483304 A 20041122

Abstract (en)

In accordance with one embodiment, the present technique provides a combustor assembly (34) for use in a gas-turbine device. The combustor assembly (34) includes a first combustion zone (66) and a second combustion zone (46). The combustor assembly (34) further includes a first premix chamber (38) configured to receive a fuel (24) and air (58) to facilitate a first fuel-air mixture (62) having a first fuel-to-air ratio, wherein the first premix chamber (38) is fluidically coupled to the combustion chamber (42) at the first combustion zone (66). The combustor assembly also includes a second premix chamber (40) configured to receive a fuel (24) and air (60) to facilitate a second fuel-air mixture (72) having a second fuel-to-air ratio, wherein the second premix chamber (40) is fluidically coupled to the combustion chamber (42) at the second combustion zone (46), wherein the second combustion zone (46) is radially outboard of the first combustion zone (66).

IPC 8 full level

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CPC (source: EP US)

F23R 3/286 (2013.01 - EP US); **F23R 3/346** (2013.01 - EP US)

Citation (applicant)

- EP 1371906 A2 20031217 - GEN ELECTRIC [US]
- US 2003074885 A1 20030424 - ROKKE NILS A [NO]

Citation (search report)

- [X] EP 1371906 A2 20031217 - GEN ELECTRIC [US]
- [X] US 2003074885 A1 20030424 - ROKKE NILS A [NO]
- [X] US 2002160330 A1 20021031 - EROGLU ADNAN [CH], et al
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EP1890083A1; EP3450850A1; CN111316041A; RU2748110C1; EP2626635A3; US11371710B2; US9074773B2; WO2019048387A1; WO2008108812A3; US11156164B2; US8015814B2; US11174792B2

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