

Title (en)
Vibration-damping combustor wall structure

Title (de)
Schwingungsdämpfende Brennkammerwandstruktur

Title (fr)
Structure de paroi de chambre de combustion absorbant les vibrations

Publication
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Application
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Priority
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Abstract (en)
The burner chamber wall extends from the chamber inlet (12) to the turbine (20) which has in this area Helmholtz dampers formed with a multi-cellular structure and set at least in some areas on the burner chamber wall (18) and/or on the front panel. The multi-cellular structure can be formed by mats and the structure of the dampers can be of different sizes. The number of cells of the structure is preferably between 10000 and 30000. At least one part of the Helmholtz dampers is cooled by a cooling air stream.

Abstract (de)
In einer Gasturbinenbrennkammer mit einer ringförmigen Brennkammer (10) erstreckt sich vom Brennkammereintritt (12) bis zur Turbine (20) dessen Brennkammerwand (18). An einem Frontpanel (36) sind Brenner (16) befestigt, wobei im Bereich der Brennkammer (10) Helmholtzdämpfer (42) angeordnet sind. Zur Unterdrückung thermoakustischer Schwingungen sind die Helmholtzdämpfer (42) Elemente einer vielzelligen Struktur, wobei die vielzellige Struktur zumindest in Teilbereichen an der Brennkammerwand (18) und/oder am Frontpanel (36) angeordnet ist. <IMAGE>

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F23R 3/00

IPC 8 full level
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Citation (search report)

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