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**Abu-Irshaid**

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(54) **ACOUSTIC DAMPENING LINER CAP AND  
GAS TURBINE COMBUSTOR INCLUDING  
THE SAME**

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See application file for complete search history.

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(57) **ABSTRACT**

A gas turbine combustor includes a combustion chamber, a liner adjacent to the combustion chamber, a liner cap capping the combustion chamber, and a swirler cup passing through the liner cap. The liner cap includes a first cavity having a first inlet receiving an air, a second cavity having a first outlet facing the combustion chamber, and an impingement plate between the first cavity and the second cavity. The air flows from the first inlet to the combustion chamber through the first cavity, the impingement plate, and the second cavity.

**12 Claims, 8 Drawing Sheets**

