

Title (en)

High-stability premix burner for gas turbines

Title (de)

Vormischbrenner mit hoher Stabilität für eine Gasturbine

Title (fr)

Brûleur à prémélange à stabilité élevée pour turbine a gaz

Publication

EP 1764553 A1 20070321 (EN)

Application

EP 05425639 A 20050914

Priority

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Abstract (en)

A premix burner for a gas turbine for use in power generation plants, comprises an axial swirler (12) to which pilot fuel gas and pilot air flow are delivered, and a duct for the premix flow (9) extending annularly and diagonally around said axial swirler (12), which contains a diagonal swirler (8) to which premix fuel gas and premix air are delivered. The axial swirler and diagonal swirler converge substantially at the outlet section (16) of the burner. A discharge throat (15) is attached to the outlet of the axial swirler (12) and extends axially from the outlet section (16) of the burner within the combustion chamber (14). The presence of the discharge throat contributes significantly towards improving the working stability at high and medium loads of the burners in Siemens gas turbine machines of the VX4 type.

IPC 8 full level

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CPC (source: EP)

F23R 3/14 (2013.01); **F23R 3/286** (2013.01); **F23R 3/343** (2013.01); **F23D 2204/10** (2013.01); **F23D 2900/00015** (2013.01)

Citation (search report)

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- [X] DE 4109304 A1 19920924 - SIEMENS AG [DE]
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