

Title (en)
PREMIXING BURNER COMPRISING A VORTEX GENERATOR DEFINING A TAPERED VORTEX SPACE, AND SENSOR MONITORING

Title (de)
VORMISCHBRENNER MIT EINEM, EINEN KEGELFÖRMIGEN DRALLRAUM BEGRENZENDEN DRALLERZEUGER MIT SENSORÜBERWACHUNG

Title (fr)
BRULEUR A PREMELANGE COMPORTANT UN GENERATEUR DE TOURBILLON DEFINISSANT UN ESPACE DE TOURBILLON CONIQUE, ET UNE SURVEILLANCE PAR CAPTEUR

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Abstract (en)
[origin: WO2005078341A1] The invention concerns a premixing burner comprising a vortex generator defining a tapered vortex space (1), the generator comprising at least two partly tapered shells (2, 3). Said partly tapered shells are mutually offset on an axis of the burner (A), they comprise air venting slots (4) extending opposite the axis of the burner (A) and, combined, an outer contour of the premixing burner flaring conically and having a maximum outer diameter (Amax) which decreases in the axial direction to form a zone with minimum outer diameter (Amin). The invention is characterized in that at least one partly tapered shell (2, 3), in the zone located between the maximum outer diameter and the minimum outer diameter, comprises a receiving unit (7) which is spaced apart from the premixing burner outer contour flaring conically and exceeding it locally in the radial direction outwards. Said receiving unit has a maximum radial span (Rmax) less than the larger half of the outer diameter (Amax) of the premixing burner outer contour. In the receiving unit (7) is located at least one hollow channel (8) provided with at least one opening longitudinally opposite the vortex space (1), said channel extending substantially parallel to the burner axis (A).

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