

Title (en)
Gas turbine burner

Title (de)
Gasturbinenbrenner

Title (fr)
Brûleur de turbine à gaz

Publication
EP 2503241 A1 20120926 (EN)

Application
EP 11159129 A 20110322

Priority
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Abstract (en)
The present invention refers to a gas turbine burner (GTB) comprising: - a main combustion room (MCR) containing a main combustion zone (MCZ) for burning a mixture of air and fuel (AFM), - at least one gas channel (GC) for supplying a stream of oxygen containing gas (OCG) to the main combustion zone (MCZ) through a gas channel exit (GCE), which gas channel (GC) is confined by channel walls (CW). To enhance especially stability it is proposed to provide said gas channel (GC) with at least one radial protrusion (RP), extending at least along a part of the circumference and continuously reducing the diameter of the axial exit throat segment (AETS) in downstream direction down to a minimum throat diameter (MTD) at a downstream axial position with regard to the axial plane of said radial inner channel wall (ICW) end (APE), wherein downstream said minimum throat diameter (MTD) the radial outer channel wall (OCW) defines an increasing channel diameter.

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Citation (search report)
• [XY] US 4845940 A 19890711 - BEER JANOS M [US]
• [Y] US 5351477 A 19941004 - JOSHI NARENDRA D [US], et al
• [Y] EP 2107310 A1 20091007 - SIEMENS AG [DE]
• [A] DE 19839085 A1 20000302 - SIEMENS AG [DE]
• [A] US 2010319353 A1 20101223 - INTILE JOHN CHARLES [US]
• [A] US 5794449 A 19980818 - RAZDAN MOHAN K [US], et al

Cited by
CN111006243A; EP2626634A3

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