Title (en)
   Gas turbine burner

Title (de)
   Gasturbinenbrenner

Title (fr)
   Brûleur de turbine à gaz

Publication
   EP 2503240 A1 20120926 (EN)

Application
   EP 11159121 A 20110322

Priority
   EP 11159121 A 20110322

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), - at least one fuel injection element (FIE) protruding from the channel wall (CW), comprising an inner cavity (IC) being supplied with fuel (F), which inner cavity (IC) joins into at least one nozzle opening (NO) of at least one nozzle (NO) of the fuel injection element (FIE) to inject fuel (F) into the gas channel (GC). To enhance especially stability and efficiency and to lower emissions it is proposed to provide said fuel injection element (FIE) with at least two separate inner cavities (IC), a first inner cavity (IC1) joining into at least a first nozzle opening (NO1) and a second inner cavity (IC2) joining into at least a second nozzle opening (N02).

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CPC (source: EP)
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Citation (search report)
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