

Title (en)
 INJECTOR FOR THE COMBUSTION CHAMBER OF A GAS TURBINE HAVING A DUAL FUEL CIRCUIT, AND COMBUSTION CHAMBER PROVIDED WITH AT LEAST ONE SUCH INJECTOR

Title (de)
 INJEKTOR FÜR DIE BRENNKAMMER EINER GASTURBINE MIT EINEM DUAL-BRENNSTOFF-KREISLAUF UND BRENNKAMMER MIT ZUMINDEST EINEM SOLCHEN INJEKTOR

Title (fr)
 INJECTEUR DE CHAMBRE DE COMBUSTION DE TURBINE A GAZ A DOUBLE CIRCUIT DE CARBURANT ET CHAMBRE DE COMBUSTION EQUIPEE D'AU MOINS UN TEL INJECTEUR

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Application
EP 12706638 A 20120127

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Abstract (en)
 [origin: WO2012104525A1] The aim of the invention is to provide a starting injector that is usable in all flight modes without additional cost or weight. To this end, said starting injector has a specific configuration comprising a dual fuel circuit and an air circuit. For this purpose, an injector (1) for the combustion chamber (3) of a gas turbine comprises a dual fuel injection circuit (C1, C2), consisting of a starting fuel circuit (C1) for ignition and then for all the flight modes, and a main fuel circuit (C2) for all the flight modes after starting. Said circuits (C1, C2) have parallel pipes (12a, 12b) in a common tube (11) having an axis (X'X). The pipe (12a) of the starting circuit is substantially in communication with the center of a spherical injector body. At said end (12e), the pipe accommodates an injection manifold (7) coupled to a central channel (41) passing through a central wall (14) of a swirler (4). The pipe (12b) of the main circuit (C2) is in communication with an annular channel (16) opposite jet channels (42). An air circuit (C3) is guided between two portions shaped as concentric spheres.

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