

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

Publication
EP 2671028 B1 20180725 (FR)

Application
EP 12706638 A 20120127

Priority
• FR 1150807 A 20110202
• FR 2012050177 W 20120127

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.

IPC 8 full level
F23R 3/14 (2006.01); **F23D 11/10** (2006.01); **F23R 3/28** (2006.01); **F23R 3/34** (2006.01)

CPC (source: EP KR US)
F23D 11/103 (2013.01 - EP US); **F23D 11/107** (2013.01 - EP US); **F23R 3/14** (2013.01 - EP KR US); **F23R 3/28** (2013.01 - US); **F23R 3/34** (2013.01 - KR); **F23R 3/343** (2013.01 - EP US); **F23D 2900/00014** (2013.01 - EP US); **F23D 2900/00015** (2013.01 - EP US); **F23D 2900/00016** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
FR 2971039 A1 20120803; **FR 2971039 B1 20130111**; CA 2825864 A1 20120909; CA 2825864 C 20190521; CN 103354890 A 20131016; CN 103354890 B 20160629; EP 2671028 A1 20131211; EP 2671028 B1 20180725; ES 2686560 T3 20181018; JP 2014504696 A 20140224; JP 5985514 B2 20160906; KR 101877591 B1 20180712; KR 20140008350 A 20140121; PL 2671028 T3 20181130; RU 2013139354 A 20150310; RU 2584741 C2 20160520; US 2013305726 A1 20131121; US 9347667 B2 20160524; WO 2012104525 A1 20120809

DOCDB simple family (application)
FR 1150807 A 20110202; CA 2825864 A 20120127; CN 201280007105 A 20120127; EP 12706638 A 20120127; ES 12706638 T 20120127; FR 2012050177 W 20120127; JP 2013552244 A 20120127; KR 20137022157 A 20120127; PL 12706638 T 20120127; RU 2013139354 A 20120127; US 201213982608 A 20120127