

Title (en)

Combustor nozzle/premixer with curved sections

Title (de)

Brennkammerdüse/-vormischer mit gekrümmten Abschnitten

Title (fr)

Injecteur pour chambre de combustion/prémélangeur avec des sections incurvées

Publication

EP 2618059 A2 20130724 (EN)

Application

EP 13151601 A 20130117

Priority

US 201213352814 A 20120118

Abstract (en)

An apparatus for premixing fuel and air prior to combustion in a gas turbine engine includes an annular fuel passage (62) receiving fuel from a fuel source. The annular fuel passage (62) includes a fuel plenum (68) and has a wave shape with a peak section surrounded by trough sections. An annular air passage (70) surrounds the annular fuel passage (62). The annular air passage (70) receives air to be mixed with the fuel in the fuel passage (62) for downstream combustion. A plurality of swirler vanes (72) are disposed in the annular air passage (70) adjacent the fuel plenum (68).

IPC 8 full level

F23R 3/28 (2006.01); **F23D 14/62** (2006.01); **F23R 3/14** (2006.01)

CPC (source: EP US)

F23D 14/62 (2013.01 - EP US); **F23R 3/14** (2013.01 - EP US); **F23R 3/286** (2013.01 - EP US)

Cited by

KR20150019142A; CN105452769A; US9851098B2; WO2015023042A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2618059 A2 20130724; **EP 2618059 A3 20141231**; CN 103216851 A 20130724; JP 2013148339 A 20130801; RU 2013103461 A 20140727; US 2013180248 A1 20130718

DOCDB simple family (application)

EP 13151601 A 20130117; CN 201310019678 A 20130118; JP 2013005028 A 20130116; RU 2013103461 A 20130117; US 201213352814 A 20120118