

Title (en)

PRE-MIXING BASED FUEL NOZZLE FOR USE IN A COMBUSTION TURBINE ENGINE

Title (de)

AUF VORMISCHUNG BASIERTE KRAFTSTOFFDÜSE ZUR VERWENDUNG IN EINEM GASTURBINENMOTOR

Title (fr)

INJECTEUR DE CARBURANT À PRÉMÉLANGE DESTINÉ À ÊTRE UTILISÉ DANS UN MOTEUR À TURBINE À COMBUSTION

Publication

EP 3278030 A1 20180207 (EN)

Application

EP 15717727 A 20150401

Priority

US 2015023849 W 20150401

Abstract (en)

[origin: WO2016160010A1] A pre-mixing type of fuel nozzle (10) for use in a combustion turbine engine is provided. The nozzle includes an array of pre-mixing conduits (20) that extends between an inlet end (14) and an outlet end (16) of a body (12) of the nozzle. The nozzle may further include an array of air flow conduits (22) disposed radially inwardly relative to the array of pre-mixing conduits. The nozzle may include an inter-conduit passageway 24 arranged to aerodynamically reduce flow recirculation in the array of pre-mixing conduits. A fuel-directing structure (26) may include non-swirl elements (28) to direct fuel flow along a radial direction, each non-swirl element including at least one orifice (32) to inject the fuel flow directed along the radial direction into a respective pre-mixing conduit to pre-mix air and fuel.

IPC 8 full level

F23D 14/58 (2006.01); **F23R 3/28** (2006.01)

CPC (source: EP US)

F23D 14/58 (2013.01 - EP US); **F23R 3/286** (2013.01 - EP US); **F23D 2206/10** (2013.01 - EP US)

Citation (search report)

See references of WO 2016160010A1

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)

WO 2016160010 A1 20161006; EP 3278030 A1 20180207; US 2018051883 A1 20180222

DOCDB simple family (application)

US 2015023849 W 20150401; EP 15717727 A 20150401; US 201515555188 A 20150401