

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

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

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