

Title (en)

SWIRLER, BURNER AND COMBUSTOR FOR A GAS TURBINE ENGINE

Title (de)

VERWIRBLER, BRENNER UND GASTURBINENBRENNKAMMER

Title (fr)

COUPELLE ROTATIVE, BRÛLEUR ET CHAMBRE DE COMBUSTION POUR TURBINE À GAZ

Publication

**EP 3278029 A1 20180207 (EN)**

Application

**EP 16710218 A 20160317**

Priority

- EP 15162154 A 20150401
- EP 2016055802 W 20160317

Abstract (en)

[origin: EP3076081A1] The invention relates to a swirler for use in a combustor of a gas turbine engine, comprising a plurality of generally radially inwardly extending passages arranged circumferentially staggered in a circle, each passage having a radially outer inlet end, a radially inner outlet end, first and second generally radially inwardly extending lateral surfaces, and a base surface and top surface, in use of the swirler fuel and air travelling along the passages from their inlet ends to their outlet ends so as to create adjacent to the outlet ends a swirling fuel/air mixture, wherein at least one surface of at least one passage comprises at least one gas fuel injection hole, characterized in that the surface, having the gas fuel injection hole, comprises at least one counterbore radially surrounding the gas fuel injection hole, wherein the gas fuel injection hole is arranged at a base of the counterbore.

IPC 8 full level

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

CPC (source: CN EP RU US)

**F23R 3/14** (2013.01 - CN EP RU US); **F23R 3/286** (2013.01 - CN EP RU US); **F23C 2900/07001** (2013.01 - CN EP US)

Cited by

WO2020259918A1; WO2020259919A1

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 3076081 A1 20161005**; CN 107466354 A 20171212; EP 3278029 A1 20180207; RU 2017134597 A 20190405; RU 2017134597 A3 20190405; RU 2690598 C2 20190604; US 2018045414 A1 20180215; WO 2016156055 A1 20161006

DOCDB simple family (application)

**EP 15162154 A 20150401**; CN 201680020973 A 20160317; EP 16710218 A 20160317; EP 2016055802 W 20160317; RU 2017134597 A 20160317; US 201615559557 A 20160317