

Title (en)

Annular Premixed Pilot in Fuel Nozzle

Title (de)

Ringförmiger Vormischungspilot in einer Kraftstoffdüse

Title (fr)

Pilote de prémélange annulaire de buse d'injection de carburant

Publication

**EP 2631544 A1 20130828 (EN)**

Application

**EP 13156828 A 20130226**

Priority

US 201213405550 A 20120227

Abstract (en)

A combustor for a gas turbine engine has a head end portion that carries at least one fuel/air nozzle (12). Each fuel/air nozzle (12) includes a premixed pilot nozzle (40) having premix conduits (41) that are configured with concentric axes that direct the fuel/air mixture axially from the premixed pilot nozzle (40). The premixed pilot nozzle (40) can include an annular channel (70) disposed radially outwardly from the premix conduits (41) and including air jets (61) that direct air radially outwardly from the premix conduits (41).

IPC 8 full level

**F23R 3/14** (2006.01); **F23C 7/00** (2006.01); **F23D 14/08** (2006.01); **F23R 3/28** (2006.01); **F23R 3/34** (2006.01)

CPC (source: EP RU US)

**F23C 7/004** (2013.01 - EP); **F23D 14/08** (2013.01 - EP); **F23R 3/14** (2013.01 - EP US); **F23R 3/286** (2013.01 - EP US); **F23R 3/343** (2013.01 - EP US); **F23C 2900/07001** (2013.01 - EP); **F23D 14/08** (2013.01 - RU); **F23R 3/14** (2013.01 - RU); **F23R 2900/03343** (2013.01 - EP US)

Citation (applicant)

US 6438961 B2 20020827 - TUTHILL RICHARD STERLING [US], et al

Citation (search report)

- [Y] US 2011162371 A1 20110707 - KHAN ABDUL RAFEY [US], et al
- [Y] US 2008083229 A1 20080410 - HAYNES JOEL MEIER [US], et al
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Cited by

EP3301374A1; EP3150918A4; GB2539536A; GB2539536B; RU2687545C1; EP3086043A1; WO2018060098A1; US10072848B2; US11371705B2; US10775047B2

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 2631544 A1 20130828**; **EP 2631544 B1 20180509**; CN 103438480 A 20131211; CN 103438480 B 20160824; JP 2013174431 A 20130905; JP 6186132 B2 20170823; RU 2013108313 A 20140910; RU 2621566 C2 20170606; US 2013219899 A1 20130829; US 2015253011 A1 20150910

DOCDB simple family (application)

**EP 13156828 A 20130226**; CN 201310061464 A 20130227; JP 2013034082 A 20130225; RU 2013108313 A 20130226; US 201213405550 A 20120227; US 201514719356 A 20150522