

Title (en)
FUEL NOZZLE AND SWIRLER

Title (de)
BRENNSTOFFDÜSE UND VERWIRBLER

Title (fr)
BUSE DE COMBUSTIBLE ET TOURBILLONNEUR

Publication
EP 4202303 A1 20230628 (EN)

Application
EP 22184802 A 20220713

Priority
• IN 202111059811 A 20211221
• US 202217700852 A 20220322

Abstract (en)
An engine (10) can utilize a combustor (14) to combust fuel to drive the engine (10). A fuel nozzle assembly (130) can supply fuel to the combustor (14) for combustion or ignition of the fuel. The fuel nozzle assembly (130) can include a swirler (134) and a fuel nozzle (132) to supply a mixture of fuel and air for combustion. Increasing efficiency and emission needs require the use of alternative fuels, which combust at higher temperatures and faster burn speeds than traditional fuels, requiring improved fuel introduction without the occurrence of flame holding or flashback.

IPC 8 full level
F23R 3/14 (2006.01); **F23R 3/28** (2006.01)

CPC (source: CN EP)
F23R 3/14 (2013.01 - EP); **F23R 3/286** (2013.01 - EP); **F23R 3/38** (2013.01 - CN); **F23R 2900/00002** (2013.01 - EP)

Citation (search report)
• [XY] US 5603211 A 19970218 - GRAVES CHARLES B [US]
• [XY] US 2020248903 A1 20200806 - SAMPATH KARTHIKEYAN [IN], et al
• [XY] US 2018045415 A1 20180215 - DAI ZHONGTAO [US], et al
• [X] US 5987889 A 19991123 - GRAVES CHARLES B [US], et al

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

Designated validation state (EPC)
KH MA MD TN

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DOCDB simple family (application)
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