

Title (en)
Multipoint injectors with auxiliary stage

Title (de)
Mehrpunktinjektoren mit Hilfsstufe

Title (fr)
Injecteurs multipoints à étage auxiliaire

Publication
EP 2719953 A3 20180103 (EN)

Application
EP 13187920 A 20131009

Priority
US 201213647867 A 20121009

Abstract (en)
[origin: EP2719953A2] A multipoint combustion system for a gas turbine engine includes a housing defining a pressure vessel. A master injector (124) is mounted to the housing (102) for injecting fuel along a central axis. A plurality of slave injectors (112) are each disposed outward of the master injector for injecting fuel and air in an ignition plume radially outward of fuel injected through the master injector. The master injector and slave injectors are configured and adapted so the injection plume of the master injector intersects with the ignition plumes of the slave injectors. A primary manifold (114) is included within the pressure vessel for distributing fuel to the slave injectors. An auxiliary manifold (116) is in fluid communication with the auxiliary nozzles of the slave injectors for issuing an auxiliary flow of fuel from the auxiliary nozzles that is separate from the fuel flow of the primary manifold.

IPC 8 full level
F23R 3/36 (2006.01); **F23R 3/28** (2006.01)

CPC (source: EP)
F23R 3/28 (2013.01); **F23R 3/36** (2013.01); **F23R 2900/00002** (2013.01)

Citation (search report)

- [X] WO 9919674 A1 19990422 - SIEMENS WESTINGHOUSE POWER [US]
- [X] US 2010139238 A1 20100610 - HALL JOEL MEADOR [US], et al
- [X] US 5359847 A 19941101 - PILLSBURY PAUL W [US], et al
- [X] EP 2206958 A2 20100714 - GEN ELECTRIC [US]
- [X] US 6405536 B1 20020618 - HO WU-CHI [TW], et al
- [A] EP 2458284 A2 20120530 - DELAVAN INC [US]

Cited by
EP3182014A1; US10436448B2

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 2719953 A2 20140416; EP 2719953 A3 20180103

DOCDB simple family (application)
EP 13187920 A 20131009