

Title (en)

Gas turbine manager furnace with fuel nozzle with controlled fuel homogeneity

Title (de)

Gasturbinenmagerbrenner mit Kraftstoffdüse mit kontrollierter Kraftstoffinhomogenität

Title (fr)

Brûleur maigre de turbine à gaz doté d'une buse à carburant ayant une homogénéité de carburant contrôlée

Publication

EP 2037172 A3 20120926 (DE)

Application

EP 08015722 A 20080905

Priority

DE 102007043626 A 20070913

Abstract (en)

[origin: EP2037172A2] Main-fuel injection (18) has central recesses (23) for controlled inhomogeneous fuel injection, especially in a peripheral direction. Their number on the periphery amounts to between 8 and 40 and, in a peripheral direction, they have a delta 2 setting angle of 10[deg] = delta 2 = 60[deg] and a delta 1 axial setting angle opposite a burner's axis between -10[deg] = delta 1 = 90[deg]. The central recesses are arranged in a single row, in multiple rows or in a zigzag layout.

IPC 8 full level

F23R 3/34 (2006.01); **F23D 11/10** (2006.01)

CPC (source: EP US)

F23D 11/107 (2013.01 - EP US); **F23R 3/343** (2013.01 - EP US)

Citation (search report)

- [X] WO 9855800 A1 19981210 - SOLAR TURBINES INC [US]
- [X] US 2005115244 A1 20050602 - GRIFFIN TIMOTHY [CH], et al
- [I] US 2005050895 A1 20050310 - DORR THOMAS [DE], et al
- [A] WO 9906767 A1 19990211 - SIEMENS AG [DE], et al
- [A] DE 102005062079 A1 20070712 - ROLLS ROYCE DEUTSCHLAND [DE]

Cited by

CN102639939A; EP2703720A3; CN108844097A; EP2549183A1; US9103552B2; US9285122B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2037172 A2 20090318; EP 2037172 A3 20120926; EP 2037172 B1 20140402; DE 102007043626 A1 20090319;
US 2009139240 A1 20090604; US 2012174588 A1 20120712; US 8646275 B2 20140211

DOCDB simple family (application)

EP 08015722 A 20080905; DE 102007043626 A 20070913; US 201213415173 A 20120308; US 23232408 A 20080915