

Title (en)
Gas turbine combustor

Title (de)
Gasturbinenbrennkammer

Title (fr)
Chambre de combustion de turbine à gaz

Publication
EP 1288576 A3 20040107 (EN)

Application
EP 02016027 A 20020718

Priority
JP 2001254360 A 20010824

Abstract (en)
[origin: EP1288576A2] A gas turbine combustor comprising a pilot nozzle (12) arranged on a central axis of said combustor and a plurality of pre-mixing nozzles (11) arranged around the pilot nozzle (12). A diameter of a combustion zone of the combustor is set such that, where an area is taken on a radial directional plane of the combustor, the area inside of the combustion zone and outside of a pitch circle (P) that is defined as a circle on which all central axes of the plurality of pre-mixing nozzles (11) are arranged, less the area taken by the plurality of pre-mixing nozzles (11) outside of the pitch circle (P), is a half or more of the area of all of the plurality of pre-mixing nozzles (11). With this structure, the flame holding ability of the combustor can be enhanced, the pilot fuel quantity can be reduced and a very low NOx generation can be realized. <IMAGE>

IPC 1-7
F23R 3/28; **F23D 14/74**; **F23D 14/78**

IPC 8 full level
F23C 99/00 (2006.01); **F23D 14/02** (2006.01); **F23D 14/74** (2006.01); **F23D 14/78** (2006.01); **F23R 3/28** (2006.01); **F23R 3/32** (2006.01)

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F23D 14/74 (2013.01 - EP US); **F23D 14/78** (2013.01 - EP US); **F23R 3/283** (2013.01 - EP US); **F23R 3/286** (2013.01 - EP US); **F23D 2900/00008** (2013.01 - EP US)

Citation (search report)

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EP 1288576 A2 20030305; **EP 1288576 A3 20040107**; CA 2394118 A1 20030224; CN 1172116 C 20041020; CN 1403745 A 20030319; JP 2003065537 A 20030305; US 2003037549 A1 20030227

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