

Title (en)
Annular combustion chamber for gas turbine

Title (de)
Gasturbinenringbrennkammer

Title (fr)
Chambre de combustion annulaire pour turbine à gaz

Publication
EP 0781967 B1 20030402 (DE)

Application
EP 96810777 A 19961112

Priority
DE 19549143 A 19951229

Abstract (en)
[origin: EP0781967A2] The improved burn gas turbine has the air flow taken from the last stage of the compressor (1) and ducted (15) to a premixing stage (5) where a swirl generator (16) and fuel injector (17) in each duct generates a premixing of the air and fuel. The mixture is ducted into a ring shaped combustion chamber (4). The air distribution ducts are arranged around the axis of the gas turbine in a spiral array. Downstream of the swirl generators the premixing ducts have a constant cross section. This is circular or rectangular. The relation between the number of vanes in the last stage of the compressor to the number of air ducts is a whole number, preferably 1 or 2.

IPC 1-7
F23R 3/04; **F23R 3/10**; **F23R 3/28**; **F23R 3/50**

IPC 8 full level
F23R 3/16 (2006.01); **F23R 3/04** (2006.01); **F23R 3/10** (2006.01); **F23R 3/20** (2006.01); **F23R 3/28** (2006.01); **F23R 3/32** (2006.01); **F23R 3/34** (2006.01); **F23R 3/42** (2006.01); **F23R 3/46** (2006.01); **F23R 3/50** (2006.01)

CPC (source: EP US)
F23R 3/045 (2013.01 - EP US); **F23R 3/10** (2013.01 - EP US); **F23R 3/286** (2013.01 - EP US); **F23R 3/50** (2013.01 - EP US); **F23R 2900/03041** (2013.01 - EP US)

Cited by
EP1816400A3; CN111396926A; WO0011403A1

Designated contracting state (EPC)
DE FR GB IT

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EP 0781967 A2 19970702; **EP 0781967 A3 19990407**; **EP 0781967 B1 20030402**; CN 1088151 C 20020724; CN 1158383 A 19970903; DE 19549143 A1 19970703; DE 59610298 D1 20030508; JP H09196379 A 19970729; US 5839283 A 19981124

DOCDB simple family (application)
EP 96810777 A 19961112; CN 96123618 A 19961227; DE 19549143 A 19951229; DE 59610298 T 19961112; JP 34588096 A 19961225; US 75172196 A 19961118