

Title (en)
Combustor and method of operation

Title (de)
Brennkammer und Verfahren zu deren Betrieb

Title (fr)
Chambre de combustion et méthode d'exploitation

Publication
EP 0845639 B1 20031001 (DE)

Application
EP 97810817 A 19971031

Priority
DE 19649486 A 19961129

Abstract (en)
[origin: EP0845639A1] The chamber comprises a cross-sectional narrowing (30) in the flow direction which enables the transition of the hot gases (21) between the first stage (20) and the succeeding stage (40). The cross-sectional narrowing has a structure with the Mach number at the outlet (31) being equal to the surface ratio of the narrowing. The surface ratio is a quotient of the outlet surface (A2) over the inlet surface (A1). The axial length (L) of the cross-sectional narrowing is 5% greater than the diameter at the inlet surface. The combustion chamber is of the ring type and is operable with at least one pre-mix burner (10).

IPC 1-7
F23R 3/42; F23R 3/16

IPC 8 full level
F23C 6/04 (2006.01); **F23M 13/00** (2006.01); **F23M 20/00** (2014.01); **F23M 99/00** (2010.01); **F23R 3/16** (2006.01); **F23R 3/42** (2006.01)

CPC (source: EP US)
F23R 3/16 (2013.01 - EP US); **F23R 3/42** (2013.01 - EP US); **F05B 2260/96** (2013.01 - EP US)

Cited by
US6113385A; US6010334A; EP0985877A1

Designated contracting state (EPC)
DE GB IT

DOCDB simple family (publication)
EP 0845639 A1 19980603; EP 0845639 B1 20031001; DE 19649486 A1 19980604; DE 59710802 D1 20031106; JP H10169986 A 19980626;
US 6050078 A 20000418

DOCDB simple family (application)
EP 97810817 A 19971031; DE 19649486 A 19961129; DE 59710802 T 19971031; JP 32803597 A 19971128; US 96586597 A 19971107