

Title (en)
Gas turbine

Title (de)
Gasturbine

Title (fr)
Turbine à gaz

Publication
EP 1342953 A1 20030910 (DE)

Application
EP 02005137 A 20020307

Priority
EP 02005137 A 20020307

Abstract (en)

The gas turbine (51) has a combustion chamber (55) and a burner (1) opening into the combustion chamber at a burner opening enclosed by a Helmholtz resonator in annular manner. The resonator has a resonator volume and opens into the burner at a resonator opening that is continued into the resonator volume by a small pipe.

Abstract (de)

Die Erfindung betrifft eine Gasturbine (51), mit einem Brenner (1), der in eine Brennkammer (55) mündet, wobei diese Mündung ringförmig von einem Helmholtzresonator (19) umgeben ist. Hierdurch werden Verbrennungsschwingungen durch engen Kontakt zur Flamme effektiv gedämpft, wobei gleichzeitig Temperaturungleichmäßigkeiten vermieden werden. <IMAGE>

IPC 1-7
F23M 13/00; F23R 3/50

IPC 8 full level
F23M 13/00 (2006.01); **F23M 20/00** (2014.01); **F23M 99/00** (2010.01); **F23R 3/22** (2006.01); **F23R 3/28** (2006.01); **F23R 3/50** (2006.01);
F23R 3/52 (2006.01)

CPC (source: EP US)
F23M 20/05 (2015.01 - EP US); **F23R 3/50** (2013.01 - EP US); **F23R 2900/00014** (2013.01 - EP US)

Citation (applicant)

- WO 9310401 A1 19930527 - SIEMENS AG [DE]
- US 6058709 A 20000509 - RICHARDS GEORGE A [US], et al
- EP 0597138 A1 19940518 - ASEA BROWN BOVERI [CH]
- EP 1004823 A2 20000531 - ASEA BROWN BOVERI [CH]

Citation (search report)

- [XY] US 5644918 A 19970708 - GULATI ANIL [US], et al
- [Y] EP 1158247 A2 20011128 - ALSTOM POWER NV [NL]
- [X] EP 0971172 A1 20000112 - ASEA BROWN BOVERI [CH]
- [X] US 4122674 A 19781031 - ANDERSSON ANDERS O, et al
- [X] EP 0577862 A1 19940112 - ABB RESEARCH LTD [CH]
- [AD] EP 0597138 A1 19940518 - ASEA BROWN BOVERI [CH]

Cited by

ITMI20122265A1; DE102005062284B4; EP1703208A1; EP2187125A1; WO2014102749A1; WO2015189101A1; WO2005003634A1;
WO2006082210A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1342953 A1 20030910; CN 1320314 C 20070606; CN 1639512 A 20050713; DE 50309686 D1 20080605; EP 1483536 A1 20041208;
EP 1483536 B1 20080423; ES 2303892 T3 20080901; JP 2005527763 A 20050915; JP 4429730 B2 20100310; US 2005144950 A1 20050707;
US 7246493 B2 20070724; WO 03074936 A1 20030912

DOCDB simple family (application)

EP 02005137 A 20020307; CN 03804511 A 20030224; DE 50309686 T 20030224; EP 0301862 W 20030224; EP 03706564 A 20030224;
ES 03706564 T 20030224; JP 2003573352 A 20030224; US 50612104 A 20040831