

Title (en)
Gas turbine with a helmholtz damper

Title (de)
Gasturbine mit einem Helmholtz-Resonator

Title (fr)
Turbine à gaz avec un amortisseur Helmholtz

Publication
EP 3029376 B1 20181003 (EN)

Application
EP 14195660 A 20141201

Priority
EP 14195660 A 20141201

Abstract (en)
[origin: EP3029376A1] A Helmholtz damper (24), especially for damping pulsations in a combustor of a gas turbine, comprises a damper volume (25, which can be connected to a damped space (19) by means of a neck tube (26), and further comprises a piston (27), which is moveable within said damper volume (25) and divides said damper volume (25) into a variable first part (V1) on one side of said piston (27), which variable first part (V1) is connected to said neck tube (26), and a correspondingly variable second part (V2) on the other side of said piston (27). The control mechanism is substantially simplified in a more compact design by said piston (27) being driven by a pressure drop (#p) between said first and second part (V1, V2) of said damper volume (25).

IPC 8 full level
F23R 3/00 (2006.01)

CPC (source: EP US)
F23R 3/002 (2013.01 - EP US); **F23R 3/16** (2013.01 - US); **F23R 2900/00013** (2013.01 - EP US); **F23R 2900/00014** (2013.01 - EP US)

Cited by
GB2557264A; GB2557264B; RU2687545C1; US11174792B2; US11156164B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3029376 A1 20160608; EP 3029376 B1 20181003; CN 105650192 A 20160608; CN 105650192 B 20200303; US 2016153661 A1 20160602

DOCDB simple family (application)
EP 14195660 A 20141201; CN 201510863130 A 20151201; US 201514934277 A 20151106