

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 A1 20160608 (EN)

Application
EP 14195660 A 20141201

Priority
EP 14195660 A 20141201

Abstract (en)
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)

Citation (applicant)
• WO 2009109454 A1 20090911 - ALSTOM TECHNOLOGY LTD [CH], et al
• EP 2397761 A1 201111221 - ALSTOM TECHNOLOGY LTD [CH]
• EP 2397760 A1 201111221 - ALSTOM TECHNOLOGY LTD [CH]
• DE 10026121 A1 20011129 - ALSTOM POWER NV [NL]
• US 8661822 B2 20140304 - SLOBODYANSKIY ILYA [RU], et al

Citation (search report)
• [X] EP 1624250 A1 20060208 - SIEMENS AG [DE]
• [AD] EP 2397761 A1 201111221 - ALSTOM TECHNOLOGY LTD [CH]
• [AD] EP 2397760 A1 201111221 - ALSTOM TECHNOLOGY LTD [CH]
• [AD] DE 10026121 A1 20011129 - ALSTOM POWER NV [NL]
• [AD] US 8661822 B2 20140304 - SLOBODYANSKIY ILYA [RU], et al
• [AD] WO 2009109454 A1 20090911 - ALSTOM TECHNOLOGY LTD [CH], et al

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RU2687545C1; GB2557264A; GB2557264B; US11156164B2; US11174792B2

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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

Designated extension state (EPC)
BA ME

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