

Title (en)  
A combustion apparatus and gas turbine engine

Title (de)  
Verbrennungsvorrichtung und Gasturbinenmotor

Title (fr)  
Appareil de combustion et moteur de turbine à gaz

Publication  
**EP 2405200 A1 20120111 (EN)**

Application  
**EP 10168429 A 20100705**

Priority  
EP 10168429 A 20100705

Abstract (en)  
The present invention discloses a combustion apparatus 100, which comprises a combustion chamber 12, in which combustion of a fuel/oxidant mix takes place, a pre-chamber 14 located upstream of the combustion chamber 12, wherein the combustion chamber 12 and the pre-chamber 14 comprise a common first wall 20 and a common second wall 30 spaced to each other building a cavity 40, and wherein the first wall 20 exhibits at least one first opening 21 for introducing a coolant into the cavity 40. With a combustion apparatus 100 according to the present invention an enhancement of the cooling of the pre-chamber 14 and the combustion chamber 12 and of the combustion flame itself can be realized.

IPC 8 full level  
**F23R 3/00** (2006.01)

CPC (source: EP US)  
**F23R 3/005** (2013.01 - EP US); **F23R 3/286** (2013.01 - US)

Citation (search report)  
• [X] EP 0896193 A2 19990210 - EUROP GAS TURBINES LTD [GB]  
• [X] WO 2008028621 A1 20080313 - MAN TURBO AG [DE], et al  
• [X] US 2009120094 A1 20090514 - NORSTER ERIC ROY [GB]  
• [X] EP 0725253 A2 19960807 - MITSUBISHI HEAVY IND LTD [JP]  
• [A] WO 0159369 A1 20010816 - ULSTEIN TURBINE AS [NO], et al

Cited by  
EP3159609A1; WO2017067775A1

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 SE SI SK SM TR

Designated extension state (EPC)  
BA ME RS

DOCDB simple family (publication)  
**EP 2405200 A1 20120111**; CN 102959333 A 20130306; EP 2553341 A1 20130206; RU 2013104536 A 20140810; US 2014144143 A1 20140529;  
WO 2012004131 A1 20120112

DOCDB simple family (application)  
**EP 10168429 A 20100705**; CN 201180033349 A 20110622; EP 11728817 A 20110622; EP 2011060492 W 20110622;  
RU 2013104536 A 20110622; US 201113808104 A 20110622