

Title (en)
HOT GAS COMPONENT WALL

Title (de)
BAUTEILWAND EINES HEISSGASBAUTEILS

Title (fr)
PAROI DE COMPOSANT À GAZ CHAUD

Publication
EP 3762586 B1 20220330 (DE)

Application
EP 19720433 A 20190412

Priority
• EP 18170851 A 20180504
• EP 2019059392 W 20190412

Abstract (en)
[origin: WO2019211082A1] The invention relates to a component wall (10) of a hot gas component for a gas turbine, which in a double-walled design, comprises an outer wall (12) which is hotter during operation and an inner wall (14) which is cooler during operation, and the interior arranged in between is divided in principle by partition walls (16) extending between the inner wall and the outer wall. A coolant (KM) can flow into the interior through inlet openings (18) arranged in the inner wall (14) and can flow out from the interior through outlet openings (20) arranged in the outer wall. To provide a component wall having an extended service life and lower temperature gradients, it is proposed to provide an inlet cavity (2) which is merely directly connected to at least one of the inlet openings (18) without being directly connected to outlet openings (20), and that at least one second cavity is provided directly next to the at least one inlet cavity (22), which second cavity is directly connected as outlet cavity (24) merely to at least one of the outlet openings (20) without being directly connected to inlet openings (18), and that the partition wall (16) dividing the relevant inlet cavity and the adjacent outlet cavity (24) has at least one through-opening (26) for conducting the coolant (KM) from the relevant inlet cavity (22) into the outlet cavity (24).

IPC 8 full level
F01D 5/18 (2006.01); **F01D 9/04** (2006.01); **F01D 25/24** (2006.01); **F23R 3/00** (2006.01); **F23R 3/04** (2006.01)

CPC (source: EP US)
F01D 5/18 (2013.01 - EP US); **F01D 5/186** (2013.01 - EP); **F01D 5/187** (2013.01 - EP); **F01D 9/04** (2013.01 - EP US); **F01D 25/12** (2013.01 - US); **F01D 25/14** (2013.01 - US); **F01D 25/246** (2013.01 - EP); **F23R 3/002** (2013.01 - EP); **F23R 3/04** (2013.01 - US); **F23R 3/06** (2013.01 - EP); **F05D 2220/32** (2013.01 - US); **F05D 2230/31** (2013.01 - US); **F05D 2240/11** (2013.01 - EP); **F05D 2240/12** (2013.01 - US); **F05D 2240/14** (2013.01 - US); **F05D 2240/30** (2013.01 - US); **F05D 2240/35** (2013.01 - US); **F05D 2260/201** (2013.01 - US); **F05D 2260/221** (2013.01 - EP); **F05D 2260/231** (2013.01 - US); **F23R 2900/03044** (2013.01 - EP)

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 3564484 A1 20191106; EP 3762586 A1 20210113; EP 3762586 B1 20220330; US 11220915 B2 20220111; US 2021156262 A1 20210527; WO 2019211082 A1 20191107

DOCDB simple family (application)
EP 18170851 A 20180504; EP 19720433 A 20190412; EP 2019059392 W 20190412; US 201917048584 A 20190412