

Title (en)

FLOW ASSEMBLY, CORRESPONDING TURBOMACHINE AND USE

Title (de)

UMSTRÖMUNGSSANORDNUNG, ZUGEHÖRIGE STRÖMUNGSMASCHINE UND VERWENDUNG

Title (fr)

DISPOSITIF D'ÉCOULEMENT ENVIRONNANT, TURBOMACHINE ET APPLICATION ASSOCIÉE

Publication

**EP 3431708 B1 20201014 (DE)**

Application

**EP 18178413 A 20180619**

Priority

DE 102017212311 A 20170719

Abstract (en)

[origin: US2019024521A1] The invention relates to a flow arrangement for placing in the hot gas duct of a turbomachine, having a first surrounding-flow structure and a second surrounding-flow structure, the surrounding-flow structures each having, in reference to the surrounding flow in the hot gas duct, a leading edge and, downstream thereof, a trailing edge, wherein the second surrounding-flow structure is provided as a deflecting blade with a suction side and a pressure side and has a lesser profile thickness than the first surrounding-flow structure, which is arranged on the suction side of the second surrounding-flow structure, and wherein, although the second surrounding-flow structure has a partial axial overlap with the first surrounding-flow structure referred to a longitudinal axis of the turbomachine, the trailing edge of the second surrounding-flow structure is, at the same time, displaced axially downstream relative to the trailing edge of the first surrounding-flow structure.

IPC 8 full level

**F01D 5/14** (2006.01); **F01D 9/04** (2006.01); **F01D 9/06** (2006.01)

CPC (source: EP US)

**F01D 5/142** (2013.01 - EP US); **F01D 9/041** (2013.01 - EP US); **F01D 9/065** (2013.01 - EP US); **F05D 2220/323** (2013.01 - US);  
**F05D 2240/121** (2013.01 - US); **F05D 2240/122** (2013.01 - US); **F05D 2240/128** (2013.01 - US); **F05D 2250/34** (2013.01 - EP US)

Cited by

WO2022090643A1; FR3115560A1

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 3431708 A1 20190123; EP 3431708 B1 20201014;** DE 102017212311 A1 20190124; ES 2832464 T3 20210610; US 11371370 B2 20220628;  
US 2019024521 A1 20190124

DOCDB simple family (application)

**EP 18178413 A 20180619;** DE 102017212311 A 20170719; ES 18178413 T 20180619; US 201816037056 A 20180717