Title (en)

Bleed flow passage

Title (de)

Blutströmungskanal

Title (fr)

Passage d'écoulement de purge

Publication

EP 2728196 A2 20140507 (EN)

Application

EP 13188098 A 20131010

Priority

GB 201219617 A 20121101

Abstract (en)

A liner wall insert (100) is provided for a compressor rotor stage (200) of a gas turbine engine. Several liner wall inserts are provided radially outboard of the tips (212) of the rotor blades (210). The liner wall inserts have bleed flow channels (110) formed therein. The bleed flow channels are arranged to remove flow from a trailing edge region of the stage and re-inject the bleed flow at an upstream region. The re-injected bleed flow alters the flow field around the tips of the rotor blades, for example the tip leakage flow. Thus, the bleed flow is used to improve the efficiency of the compressor rotor stage, and thus of the gas turbine engine.

IPC 8 full level

B23C 3/00 (2006.01); **F04D 27/02** (2006.01); **F04D 29/16** (2006.01)

CPC (source: EP US)

F04D 29/164 (2013.01 - EP US); **F04D 29/526** (2013.01 - EP US); **F04D 29/685** (2013.01 - EP US); F04D 27/0207 (2013.01 - EP US); Y10T 29/49229 (2015.01 - EP US)

Cited by

EP3106672A1; BE1023215B1; FR3122450A1; EP3054166A1; US10359054B2; US9932985B2; US10760580B2; US11466694B2; WO2022229555A2; WO2022229555A3

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2728196 A2 20140507; GB 201219617 D0 20121212; US 2014119883 A1 20140501

DOCDB simple family (application)

EP 13188098 A 20131010; GB 201219617 A 20121101; US 201314050838 A 20131010