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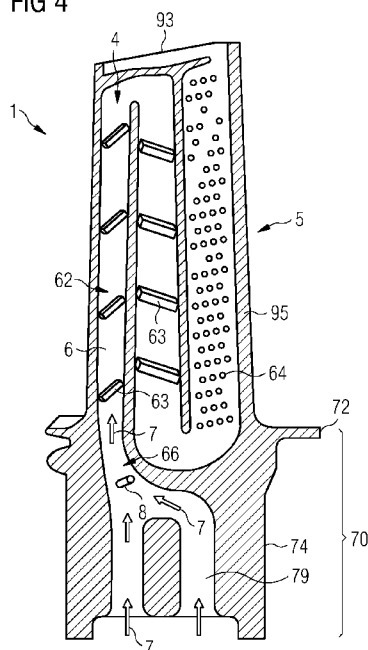
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(54) Title: A TURBOMACHINE BLADE OR VANE HAVING A VORTEX GENERATING ELEMENT

FIG 4



(57) Abstract: A turbomachine component, such as a blade or a vane, is presented. The turbomachine component has an aerofoil. The aerofoil includes a suction side wall and a pressure side wall bordering an aerofoil cavity. The turbomachine component has at least one cooling channel, for flow of a cooling fluid, extending inside the aerofoil cavity. The cooling channel has an inlet for receiving the cooling fluid and a series of turbulators positioned inside the cooling channel. The turbomachine component includes at least one vortex generating element positioned at the inlet of the cooling channel upstream of the turbulators or positioned adjacent to and upstream of the inlet of the cooling channel. The cooling fluid flows about and contiguous with the vortex generating element before the cooling fluid reaches the turbulators. The vortex generating element generates a swirl in the cooling fluid before the cooling fluid reaches the turbulators.

INTERNATIONAL SEARCH REPORT

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ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
F01D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 2 899 370 A1 (DOOSAN HEAVY IND & CONSTR [KR]) 29 July 2015 (2015-07-29) paragraphs [0001] - [0007] paragraphs [0037] - [0055] figures 1-5 claims 1-3	1-16
X	WO 2014/150681 A1 (UNITED TECHNOLOGIES CORP [US]) 25 September 2014 (2014-09-25) paragraphs [0034] - [0052] figures 2,4-7	1-16
X	WO 2007/012592 A1 (SIEMENS AG [DE]; AHMAD FATHI [DE]) 1 February 2007 (2007-02-01) page 2, line 10 - page 4, line 11 figures 3,4	1-16
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	US 2010/068066 A1 (BUNKER RONALD SCOTT [US]) 18 March 2010 (2010-03-18) paragraphs [0002] - [0005] paragraphs [0022] - [0029] paragraphs [0034] - [0036] figures 2-8 -----	1-16

INTERNATIONAL SEARCH REPORT

Information on patent family members

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