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(54) **Leading edge cooling of a gas turbine component using staggered turbulator strips**

(57) A turbine engine component has an airfoil portion (32) having a leading edge, a suction side (46), a pressure side (42) and a radial flow leading edge cavity (34) through which a cooling fluid flows for cooling the

leading edge. The turbine engine component further has a staggered arrangement of trip strips (40; 44) for generating a vortex (49) in the leading edge cavity (34) which impinges on a nose portion (36) of the leading edge cavity (34).

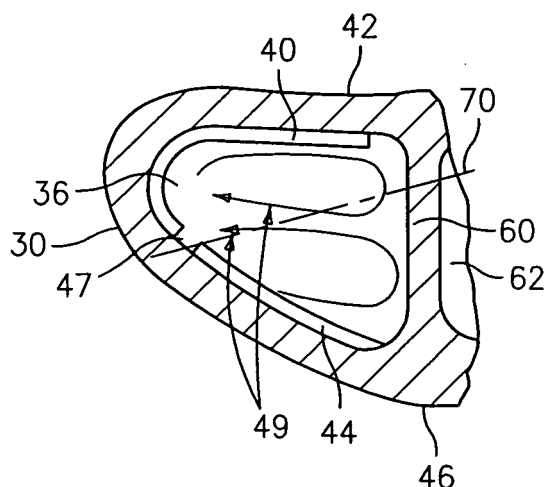


FIG. 7



EUROPEAN SEARCH REPORT

Application Number
EP 07 25 2545

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 16 November 2010	Examiner Gombert, Ralf
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EUROPEAN SEARCH REPORT

Application Number
EP 07 25 2545

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 16 November 2010	Examiner Gombert, Ralf
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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