

Title (en)
COOLED BLADE FOR A GAS TURBINE

Title (de)
GEKÜHLTE SCHAUFEL FÜR EINE GASTURBINE

Title (fr)
AUBE REFROIDIE POUR UNE TURBINE A GAZ

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Application
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Abstract (en)
[origin: WO2005068783A1] The invention relates to a cooled blade (10) for a gas turbine, comprising a blade vane (11) which extends from the foot of a blade (12) and a blade shaft (25), and which comprises a front edge (19) and a rear edge (20), in addition to a plurality of cooling channels (13, 14, 15), which are disposed within the blade vane (11), extending in a radial direction and arranged in a successive manner in the direction of flow. A first cooling channel (13) disposed along the front edge (19) and a second cooling channel (15) disposed along the rear edge (20), extending from the foot of a blade (12) to the tip of the blade vane (11), are cross-flown by a main flow of a cooling liquid. The inlet of the first cooling channel (13) is placed in contact with a main cooling inlet (16) and the outlet of the first cooling channel (13) is placed in contact with the inlet of the second cooling channel (15) via of a first deviation area (17), a third cooling channel (14) which is arranged between the first and the second cooling channel (13, 15), and a second deviation area (18). First means (23) are provided, said means enabling an additional flow of a cool cooling medium to be added, from the outside, to the main heated flow of the cooling medium, from the third cooling channel (14) and penetrating into the second cooling channel (15). The aim of the invention is to produce said blade in a particularly simple manner by virtue of the fact that the first means comprise a bore hole (23) extending from the main cooling inlet (16) to the second deviation area (18).

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