

Title (en)

GAS TURBINE COOLING STATIONARY BLADE

Title (de)

KÜHLUNG VON STATORSCHAUFELN IN GASTURBINEN

Title (fr)

PALE FIXE DE REFROIDISSEMENT DE TURBINE A GAZ

Publication

EP 0911488 A4 20001129 (EN)

Application

EP 98917726 A 19980428

Priority

- JP 9801958 W 19980428
- JP 11384597 A 19970501

Abstract (en)

[origin: EP0911488A1] In a cooled stationary blade assembly for a gas turbine, an interior of a blade and an inner shroud are cooled by steam to eliminate the use of air cooling. Steam passages 33A, 33B, 33C, 33D, 33E and 33F are provided in the stationary blade 30. The cooling steam 39 is introduced from the steam passage 33A on the front edge side through an outer shroud and passes, in order, through the steam passages 33B, 33C, 33D, and 33E to flow into the steam passage 33F at the rear edge side to cool the interior of the blade, and is recovered through the outer shroud from the upper portion of the steam passage 33F. A portion of the steam from the steam passage 33A is introduced into the inner shroud 31, enters to steam passages 20 from a steam introduction passage 22, branches to the right and left through both end portions, and flows out into the steam passage 33F at the rear edge from a steam discharge passage 21. Not only the interior of the blade, but also the interior of the inner shroud 31 is cooled by the steam so that the cooling air is dispensed with. <IMAGE>

IPC 1-7

F01D 9/04; **F01D 25/12**; **F01D 5/18**

IPC 8 full level

F01D 5/18 (2006.01); **F01D 9/02** (2006.01); **F01D 9/04** (2006.01); **F02C 7/18** (2006.01)

CPC (source: EP)

F01D 5/187 (2013.01); **F01D 9/02** (2013.01); **F05D 2240/10** (2013.01); **F05D 2240/81** (2013.01); **F05D 2260/22141** (2013.01)

Citation (search report)

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- [X] EP 0698723 A2 19960228 - GEN ELECTRIC [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 379 (M - 1447) 16 July 1993 (1993-07-16)
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 133 (M - 1383) 19 March 1993 (1993-03-19)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 360 (M - 1634) 7 July 1994 (1994-07-07)
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