

Title (en)
Method for improving the flow stability of a turbo compressor

Title (de)
Verfahren zur Verbesserung der Strömungsstabilität eines Turbokompressors

Title (fr)
Méthode d' amélioration de la stabilité de courant d' une turbomachine

Publication
EP 1674734 A1 20060628 (DE)

Application
EP 04106808 A 20041221

Priority
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Abstract (en)
The method is for the individual modifying of a turbocompressor for the purpose of adapting to specific framework conditions during operation, whereby blades (232) installed in a blade ring are installed by their roots (231) in a circumferentially extending slot in the rotor shaft or casing. In an axial blade cascade of the compressor the number of blades installed in a blade ring can be increased. At least one distance piece (24) installed in the circumferential direction (U) between two blade roots can be removed and at least one additional blade fitted. Independent claims are included for the following: (A) a rotor of a turbocompressor with at least blade row which can be modified in accordance with the proposed method; (B) a stator of a turbocompressor with at least blade row which can be modified in accordance with the proposed method; (C) a turbocompressor comprising at least one rotor or stator according to the invention; and (D) a gas turbine unit including a turbocompressor with at least one modifiable rotor or stator according to the invention.

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CPC (source: EP US)
F04D 29/541 (2013.01 - EP US)

Citation (search report)
• [XY] US 6379112 B1 20020430 - MONTGOMERY MATTHEW [US]
• [YA] GB 777955 A 19570703 - RUSTON & HORNSBY LTD
• [A] EP 0707150 A2 19960417 - ABB MANAGEMENT AG [CH]

Cited by
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