

Title (en)

Fan blade axial locking device.

Title (de)

Axialbefestigung einer Verdichterschaufel.

Title (fr)

Dispositif de verrouillage axial d'aubes de soufflante.

Publication

EP 0113598 A1 19840718 (FR)

Application

EP 83402058 A 19831024

Priority

FR 8218652 A 19821108

Abstract (en)

[origin: US4502841A] An axial locking device for blades of a fan, each blade including a root of dovetail or other re-entrant form engageable by axial sliding in corresponding grooves of the rim of the fan disc. A locking member is provided in the form of a key of parallelepiped form abutting the root of the blade. The key is locked against radially outward motion by a peripheral extension from one longer edge which engages a tab member having a portion which is secured to a front face of the fan rim. The key engages radial slots in the rim and in an alternative embodiment, the key is secured radially by a bolt which passes through a forward part of the rim, an end portion of the key and into a tapped bore of the main body of the rim.

Abstract (fr)

Dispositif de verrouillage axial d'aubes de soufflante, l'aube comportant un pied en queue d'aronde susceptible d'être engagé par coulissement axial dans des alvéoles correspondants de la jante du disque. L'organe de verrouillage est constitué d'une clavette (8) de forme parallélépipédique, contre laquelle est en appui le pied (3) de l'aube, ladite clavette étant verrouillée radialement vers l'intérieur. L'invention est utilisée pour le verrouillage axial des aubes de turbomachine.

IPC 1-7

F01D 5/30

IPC 8 full level

F04D 29/34 (2006.01); **F01D 5/30** (2006.01)

CPC (source: EP US)

F01D 5/326 (2013.01 - EP US); **F05D 2250/22** (2013.01 - EP US)

Citation (search report)

- EP 0061948 A1 19821006 - SNECMA [FR]
- US 3656865 A 19720418 - SPEARS ESTEN W JR
- US 4033705 A 19770705 - LUEBERING GEORGE W
- US 2949278 A 19600816 - MCCORMICK HAMILTON L
- US 3748060 A 19730724 - HUGOSON B, et al
- GB 739870 A 19551102 - PARSONS C A & CO LTD

Cited by

GB2299834A; US5624233A; GB2299834B

Designated contracting state (EPC)

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FR 2535793 A1 19840511; FR 2535793 B1 19870410; DE 3371106 D1 19870527; EP 0113598 A1 19840718; EP 0113598 B1 19870422; JP S59101598 A 19840612; JP S6367040 B2 19881222; US 4502841 A 19850305

DOCDB simple family (application)

FR 8218652 A 19821108; DE 3371106 T 19831024; EP 83402058 A 19831024; JP 20890183 A 19831107; US 54297383 A 19831018