

Title (en)

Device and method for mounting a root of a blade of a turbomachine and a turbomachine with such a device

Title (de)

Vorrichtung und Verfahren für die Montage eines Schaufelfusses einer Turbomaschine und eine Turbomaschine mit einer solchen Vorrichtung.

Title (fr)

Ensemble et procédé pour le montage du pied d'une aube de turbomachine et turbomachine comportant un tel ensemble

Publication

EP 177371 A1 20070425 (FR)

Application

EP 06119409 A 20060823

Priority

FR 0508768 A 20050826

Abstract (en)

The assembly has apertures (101) distributed radially and equidistantly over entire length of a circumference of a disk (10) that is open toward the outside. Each aperture has a shape complementary to the shape of a foot (121) of a blade (12) to form a mounting of dovetail type. A non-metallic film (20) coated with an adhesive is placed between the foot and the aperture to cover the whole surface of the foot. Lateral walls (122) of the foot of the blade are supported against lateral walls (102) of the aperture, so as to allow the retention of the blade in the interior of the aperture. Independent claims are also included for the following: (1) a turbomachine fan comprising assemblies for mounting of the foot of a blade (2) a turbomachine compressor comprising assemblies for mounting of the foot of a blade (3) a turbomachine equipped with assemblies for mounting of the foot of a blade (4) a method for mounting of the foot of a turbine blade in an aperture of a metal support.

IPC 8 full level

F01D 5/30 (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)

F01D 5/288 (2013.01 - EP US); **F01D 5/3092** (2013.01 - EP US); **F05D 2230/90** (2013.01 - EP US); **F05D 2300/432** (2013.01 - EP US);
F05D 2300/603 (2013.01 - EP US); **F05D 2300/611** (2013.01 - EP US)

Citation (applicant)

US 5160243 A 19921103 - HERZNER FREDRICK C [US], et al

Citation (search report)

- [XY] WO 9641068 A1 19961219 - CA NAT RESEARCH COUNCIL [CA]
- [YA] US 6332490 B1 20011225 - GRIGGS PHILIP R [US]
- [A] US 6102664 A 20000815 - NGUYEN NHAN [US]
- [A] GB 709636 A 19540602 - ROLLS ROYCE
- [A] EP 0678590 A1 19951025 - UNITED TECHNOLOGIES CORP [US]

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

FR 2890126 A1 20070302; FR 2890126 B1 20101029; CA 2557109 A1 20070226; CN 1920259 A 20070228; EP 1777371 A1 20070425;
JP 2007064220 A 20070315; RU 2006130731 A 20080227; US 2007048142 A1 20070301

DOCDB simple family (application)

FR 0508768 A 20050826; CA 2557109 A 20060823; CN 200610111942 A 20060828; EP 06119409 A 20060823; JP 2006229024 A 20060825;
RU 2006130731 A 20060825; US 50958206 A 20060825