Title (en)

METHOD FOR ASSEMBLING AND DISASSEMBLING A ROTOR HAVING A NUMBER OF ROTOR COMPONENTS OF AN AXIAL FLOW TURBOMACHINE AND SUCH A ROTOR

Title (de)

VERFAHREN ZUM ZUSAMMENSETZEN BZW. LÖSEN EINES EINE ANZAHL VON ROTORBAUTEILEN UMFASSENDEN ROTORS EINER AXIAL DURCHSTRÖMBAREN TURBOMASCHINE UND DERARTIGER ROTOR

Title (fr)

PROCÉDÉ PERMETTANT D'ASSEMBLER OU DE DÉSASSEMBLER UN ROTOR COMPORTANT UNE PLURALITÉ D'ÉLÉMENTS DE ROTOR POUR UNE TURBOMACHINE À ÉCOULEMENT AXIAL ET ROTOR DE CE TYPE

Publication

EP 2888448 A1 20150701 (DE)

Application

EP 13763011 A 20130906

Priority

- DE 102012215886 A 20120907
- EP 2013068507 W 20130906

Abstract (en)

[origin: WO2014037521A1] Rotor for an axial flow turbomachine and double nut for connecting two tie-rod elements. The invention relates to a rotor (10) for an axial flow turbomachine, comprising a number of a plurality of disc-shaped (12) or drum-shaped (16) rotor components and at least one pin-shaped tie-rod (20) extending through the rotor components (14), wherein a counter-bearing (26, 28) is screwed onto each of the projecting ends of said tie-rod for axially bracing the rotor components (14) arranged therebetween. The aim of the invention is to provide a rotor (10) by which shorter service intervals can be achieved. In order to achieve said aim, the tie-rod (20) comprises at least two axially adjacent tie-rod elements (30, 32) which are each connected to one another in a detachable manner by a connecting means (34). Double nut (35) for connecting two tie-rod elements (30, 32).

IPC 8 full level

F01D 5/06 (2006.01); **F04D 29/054** (2006.01)

CPC (source: EP US)

F01D 5/066 (2013.01 - EP US); F05D 2260/31 (2013.01 - EP US); Y10T 29/49318 (2015.01 - EP US); Y10T 29/49321 (2015.01 - EP US)

Citation (search report)

See references of WO 2014037523A1

Citation (examination)

- GB 2452932 A 20090325 - SIEMENS AG [DE]
- US 2009067947 A1 20090312 - ICHIRYU TAKU [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2014037521 A1 20140313; BR 112015004983 A2 20170704; BR 112015004993 A2 20170704; CA 2884126 A1 20140313; CA 2884133 A1 20140313; CN 104603396 A 20150506; CN 104603396 B 20160824; CN 104619954 A 20150513; CN 104619954 B 20160824; EP 2880264 A1 20150610; EP 2888448 A1 20150701; IN 1253DEN2015 A 20150626; IN 890DEN2015 A 20150612; JP 2015527534 A 20150917; JP 2015528539 A 20150928; KR 20150047508 A 20150504; KR 20150047509 A 20150504; MX 2015002944 A 20150602; RU 2015109757 A 20161027; RU 2015112596 A 20161027; SA 515360111 B1 20160224; SA 515360112 B1 20151220; US 2015247406 A1 20150903; US 2015260044 A1 20150917; WO 2014037523 A1 20140313

DOCDB simple family (application)

EP 2013068505 W 20130906; BR 112015004983 A 20130906; BR 112015004993 A 20130906; CA 2884126 A 20130906; CA 2884133 A 20130906; CN 201380046776 A 20130906; CN 201380046855 A 20130906; EP 13762773 A 20130906; EP 13763011 A 20130906; EP 2013068507 W 20130906; IN 1253DEN2015 A 20150216; IN 890DEN2015 A 20150204; JP 2015530418 A 20130906; JP 2015530419 A 20130906; KR 20157005701 A 20130906; KR 20157005723 A 20130906; MX 2015002944 A 20130906; RU 2015109757 A 20130906; RU 2015112596 A 20130906; SA 515360111 A 20150304; SA 515360112 A 20150304; US 201314425013 A 20130906; US 201314425016 A 20130906