

Title (en)

Control system for variable guide vane stages of a turbomachine

Title (de)

Kontrollanlage für verstellbare Leitschaufelstufen einer Turbomaschine

Title (fr)

Système de commande d'étages d'aubes de stator à angle de calage variable de turbomachine

Publication

**EP 1724472 A3 20090121 (FR)**

Application

**EP 06112991 A 20060424**

Priority

FR 0504918 A 20050517

Abstract (en)

[origin: EP1724472A2] The system has an actuator (24) for turning a leader ring (22) of a stage (10) of a variable-pitch stator vane via a bell crank type leader unit (26) pivotally mounted on a casing (12). A synchronization bar (30) transmits the turning movement of the ring driven by the actuator to a follower ring (22') of another stage (10') via a bell crank type follower unit (26') pivotally mounted on the casing. An additional crank (44) is interposed between the unit (26') and the ring (22') and is pivotally mounted both on the casing and the unit (26').

IPC 8 full level

**F01D 17/16** (2006.01); **F04D 29/56** (2006.01)

CPC (source: EP US)

**F01D 17/162** (2013.01 - EP US); **F04D 27/0246** (2013.01 - EP US); **F04D 29/563** (2013.01 - EP US); **F05D 2260/50** (2013.01 - EP US); **F05D 2260/76** (2013.01 - EP US); **F05D 2270/58** (2013.01 - EP US)

Citation (search report)

- [A] EP 1489267 A1 20041222 - SNECMA MOTEURS [FR]
- [A] US 5044879 A 19910903 - FARRAR PETER G G [GB]
- [AD] EP 0909880 A2 19990421 - GEN ELECTRIC [US]
- [A] US 5190439 A 19930302 - DAS RANJAN [US]
- [A] US 4295784 A 19811020 - MANNING FRANK B
- [A] EP 0765992 A1 19970402 - SNECMA [FR]

Cited by

FR2993932A1; FR2936556A1; EP2703606A1; FR2936565A1; FR2936559A1; CN102171417A; CN102758654A; FR3076325A1; US8591173B2; US8690521B2; US11149580B2; WO2010149725A1; US9068470B2; WO2010149724A1; EP2258926A3; EP3770381A1; WO2010037949A1; WO2010037749A1; WO2014016512A1; US8328500B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1724472 A2 20061122**; **EP 1724472 A3 20090121**; **EP 1724472 B1 20100616**; CA 2547026 A1 20061117; CA 2547026 C 20130917; DE 602006014902 D1 20100729; FR 2885969 A1 20061124; FR 2885969 B1 20070810; JP 2006322457 A 20061130; JP 4773876 B2 20110914; RU 2006116817 A 20071127; RU 2396438 C2 20100810; US 2006263206 A1 20061123; US 7322790 B2 20080129

DOCDB simple family (application)

**EP 06112991 A 20060424**; CA 2547026 A 20060516; DE 602006014902 T 20060424; FR 0504918 A 20050517; JP 2006136074 A 20060516; RU 2006116817 A 20060516; US 38328706 A 20060515