

Title (en)
MULTI-AIRFOIL GUIDE VANE UNIT

Title (de)
LEITSCHAUFELEINHEIT MIT MEHRFACHPROFIL

Title (fr)
UNITÉ D'AUBES DIRECTRICES À PROFILS AÉRODYNAMIQUES MULTIPLES

Publication
EP 3075960 A1 20161005 (EN)

Application
EP 15161814 A 20150331

Priority
EP 15161814 A 20150331

Abstract (en)
A multi-airfoil guide vane unit (1) comprises a first platform member (14), a second platform member (15), and at least two airfoil members (11, 12, 13), the airfoil members having a longitudinal extent along an airfoil span width and two longitudinal ends, wherein all airfoil members are rigidly affixed to a platform member at a first longitudinal end and at least one airfoil member (11, 13) is rigidly affixed to both platform members at both longitudinal ends. At least one of the airfoil members (12) is floatingly connected to one of the platform members (14) at a second longitudinal end (121). A longitudinally floating joint arrangement is thus provided between the second longitudinal end (121) of the airfoil member 812) and the platform member, such as to allow displacement of the airfoil member (12) relative to said platform member (14) along the longitudinal extent (2) of said airfoil member (12). In particular, the floating joint arrangement comprises a male joint feature (123) provided at one of the second longitudinal end (121) of the airfoil member and the platform member (14) and a female joint feature (141) provided at the other one of the second longitudinal end of the airfoil member and the platform member, the male feature being received within said female feature.

IPC 8 full level
F01D 9/04 (2006.01)

CPC (source: CN EP KR US)
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Citation (applicant)
• EP 1176284 A2 20020130 - GEN ELECTRIC [US]
• US 5797725 A 19980825 - RHODES JEFFREY F [US]
• US 8257038 B2 20120904 - JAMES ALLISTER W [US]

Citation (search report)
• [X] US 5421703 A 19950606 - PAYLING STEPHEN R [US]
• [X] US 4834613 A 19890530 - HANSEN LEE E [US], et al
• [AD] US 5797725 A 19980825 - RHODES JEFFREY F [US]
• [A] US 2010111682 A1 20100506 - SCOGGINS PATRICK JARVIS [US], et al
• [A] WO 2014158284 A2 20141002 - FREEMAN TED J [US], et al
• [A] US 2011002787 A1 20110106 - CASTRO ENRIQUE PENALVER [BE], et al

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)
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DOCDB simple family (application)
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