

Title (en)
BLADE ELEMENT CROSS-TIES

Title (de)
SCHAUFELEMENT MIT QUERSTREBE

Title (fr)
TRAVERSES D'ÉLÉMENT DE PALE

Publication
EP 2942484 B2 20230503 (EN)

Application
EP 15166907 A 20150508

Priority
US 201461991328 P 20140509

Abstract (en)
[origin: EP2942484A1] The invention concerns a blade element for a gas turbine engine and methods of manufacturing said blade elements. In one embodiment, a blade element 100 includes a first inner surface 108 of the blade element, wherein the first inner surface 108 is associated with a first outer blade surface 106 of the blade element, and a second inner surface 109 of the blade element, wherein the second inner surface 109 is associated with a second outer blade surface 107 of the blade element and wherein the second inner surface 109 is opposite from the first inner surface 108. The blade element 100 also includes a cross-tie 130 1 configured to connect the first inner surface 108 to the second inner surface 109, wherein the cross-tie 130 1 is positioned along a trailing edge 110 of the blade element 100 and the cross-tie 130 1 is configured to reduce vibration mode effects of the blade element 100.

IPC 8 full level
F01D 5/16 (2006.01); **F01D 5/18** (2006.01)

CPC (source: EP US)
F01D 5/16 (2013.01 - EP US); **F01D 5/187** (2013.01 - EP US); **F05D 2250/27** (2013.01 - EP); **F05D 2260/96** (2013.01 - EP US);
Y10T 29/49337 (2015.01 - EP US)

Citation (opposition)

Opponent :
• US 2013232991 A1 20130912 - OTERO EDWIN [US]
• WO 2014186109 A1 20141120 - UNITED TECHNOLOGIES CORP [US]

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

DOCDB simple family (publication)

EP 2942484 A1 20151111; EP 2942484 B1 20200422; EP 2942484 B2 20230503; US 2015322797 A1 20151112

DOCDB simple family (application)

EP 15166907 A 20150508; US 201514694435 A 20150423