

Title (en)  
Balancing method

Title (de)  
Auswuchtverfahren

Title (fr)  
Procédé d'équilibrage

Publication  
**EP 2803867 A3 20150617 (EN)**

Application  
**EP 14161532 A 20140325**

Priority  
GB 201308596 A 20130514

Abstract (en)  
[origin: GB2506712A] A method of balancing a set of retaining 3 and locking 5 plates used to retain a row of gas turbine engine aerofoil blades 1 in attachment to a rotor disc 7 includes providing a weighing plate 109 having a circular track. A set of retaining and locking plates 3, 5 are arranged on the track on the weighing plate 109 against an abutment shoulder 113, and the static balance is determined by a non-rotating, static balancing apparatus. The plates 3, 5 are then repositioned on the track to arrive at a balanced arrangement for the set of plates. The locking plates may have a smaller circular extent than the retaining plates and may have a different mass per unit arc. These differences may be used to facilitate balancing. The balanced set of plates is positioned in a circumferential row at the rim of the disc to retain the blade roots in the retaining slots.

IPC 8 full level  
**F04D 29/66** (2006.01); **F01D 5/02** (2006.01); **F01D 5/30** (2006.01)

CPC (source: EP GB US)  
**F01D 5/027** (2013.01 - EP GB US); **F01D 5/3015** (2013.01 - EP GB US); **F04D 29/322** (2013.01 - EP US); **F04D 29/662** (2013.01 - EP US); **Y10T 29/49321** (2015.01 - EP US); **Y10T 29/49764** (2015.01 - EP US)

Citation (search report)

- [A] EP 0609979 A1 19940810 - ROLLS ROYCE PLC [GB]
- [A] US 2009004018 A1 20090101 - DEJAUNE CLAUDE GERARD RENE [FR], et al
- [A] US 2755063 A 19560717 - HENRY WILKINSON WILFRED
- [A] US 5256035 A 19931026 - NORRIS JAMES W [US], et al

Cited by  
EP4345248A1

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)  
**GB 201308596 D0 20130619**; **GB 2506712 A 20140409**; **GB 2506712 B 20180502**; EP 2803867 A2 20141119; EP 2803867 A3 20150617; US 2014338193 A1 20141120

DOCDB simple family (application)  
**GB 201308596 A 20130514**; EP 14161532 A 20140325; US 201414224721 A 20140325