

Title (en)
Gas turbine vane attachment

Title (de)
Vorrichtung zur Befestigung von Gasturbinenleitschaufel

Title (fr)
Dispositif de fixation d'aubes statoriques de turbine à gaz

Publication
EP 2163734 A2 20100317 (EN)

Application
EP 09169441 A 20090904

Priority
US 20931408 A 20080912

Abstract (en)
Base hooks (110, 112) of a vane (106) includes an approximate two times thicker radial geometry, with dimensioning and tolerancing that results in a line-line to loose fit on the forward OD hook surface (114) and the aft ID hook surface (116). Tolerances thus stack up on the opposite, non-critical surfaces of the hooks (the forward ID hook surface (118) and the aft OD hook surface (120)). The base of the vane (106) is curved to match that of the casing (102). An interface between the vane base and the casing groove (102) includes a metal alloy liner (140). Also, a wear coating is provided on the vane attachment hooks (110, 112). The liner (140) protects the casing groove (102) from wear damage, while the hook coating and the liner (140) provide a wear coupling between the vane base and the casing (102) that provides a barrier between the vane bases and the casing (102) to decrease the wear rate.

IPC 8 full level
F01D 25/24 (2006.01)

CPC (source: EP US)
F01D 9/042 (2013.01 - EP US); **F01D 25/246** (2013.01 - EP US)

Cited by
FR3120911A1; EP2434107A3; EP2508715A3; EP2612998A3

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