

Title (en)

MULTIFUNCTIONAL SUPPORT DISC FOR A LABYRINTH SEAL OF A TURBO MACHINE ROTOR

Publication

EP 0214876 B1 19890315 (FR)

Application

EP 86401519 A 19860709

Priority

FR 8512142 A 19850808

Abstract (en)

[origin: US4668167A] A multifunctional labyrinth seal support disk for a turbojet engine rotor is disclosed which also serves to axially lock the rotor blades onto the rotor wheel. A radial support disk has a generally conical, labyrinth seal means extending from the disk in an upstream direction and a conical collar extending from the disk in a downstream direction. The collar has a generally annular bearing surface which bears against an upstream side of the rotor blade roots. Several blade-retaining teeth extend from the collar in a downstream direction and are dimensioned so as to fit within axial grooves between the blade root and the rotor blade wheel. Radially extending spurs bear against the downstream portion of the rotor blade root to axially lock the rotor blade onto the disk. An attaching ring is interposed between the blade retaining teeth and the rotor blade wheel so as to axially lock the multifunctional disk with respect to the rotor blade wheel.

IPC 1-7

F01D 5/30; F01D 11/00; F01D 5/26

IPC 8 full level

F01D 5/30 (2006.01); **F01D 11/00** (2006.01)

CPC (source: EP US)

F01D 5/3015 (2013.01 - EP US); **F01D 5/323** (2013.01 - EP US); **F01D 11/001** (2013.01 - EP US); **F01D 11/006** (2013.01 - EP US)

Cited by

GB2272946A; GB2270544A; GB2270544B; EP0463955A1; FR2663997A1; US5173024A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0214876 A1 19870318; EP 0214876 B1 19890315; DE 3662421 D1 19890420; FR 2586061 A1 19870213; FR 2586061 B1 19890609;
US 4668167 A 19870526

DOCDB simple family (application)

EP 86401519 A 19860709; DE 3662421 T 19860709; FR 8512142 A 19850808; US 89034186 A 19860729