

Title (en)

Support disc with stiffening element for the labyrinth seal of a turbo machine rotor

Title (de)

Labyrinthträgerscheibe mit einer eingebauten Versteifung für Turbomaschinenrotor

Title (fr)

Disque labyrinthe avec raidisseur incorpore pour rotor de turbomachine

Publication

EP 0789133 B1 20000301 (FR)

Application

EP 97400211 A 19970130

Priority

FR 9601527 A 19960208

Abstract (en)

[origin: EP0789133A1] The labyrinth seal disc (12) consists of a main rim (13) incorporating labyrinth seals (10). An arched section (14) presses against the forward surface (19) of the rotor disc (8). Fixing bolts (6) are located between the two discs. The seal disc incorporates a main radial stiffener (23) just inside the labyrinth seal. The arched section of the disc is formed in the upper part of the rim (13), is elongated in a radial direction and slightly convex. The rear edge (22) of the disc is on a level with the rear portion of the stiffener. Additional fixings between the two discs are provided by teeth (24) on the back of the seal disc engaging with slots in the rotor disc. The arched section is reinforced by ribs (26) extending from the teeth.

IPC 1-7

F01D 11/00; **F01D 5/06**

IPC 8 full level

F01D 5/06 (2006.01); **F01D 11/00** (2006.01)

CPC (source: EP US)

F01D 5/066 (2013.01 - EP US); **F01D 5/081** (2013.01 - US); **F01D 5/3015** (2013.01 - EP); **F01D 11/001** (2013.01 - EP US)

Cited by

FR3078363A1; FR2961249A1; EP2942483A1; US10697321B2; US10920611B2

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EP 0789133 A1 19970813; **EP 0789133 B1 20000301**; CA 2196642 A1 19970809; CA 2196642 C 20051115; DE 69701332 D1 20000406; DE 69701332 T2 20000727; FR 2744761 A1 19970814; FR 2744761 B1 19980313; US 5816776 A 19981006

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EP 97400211 A 19970130; CA 2196642 A 19970203; DE 69701332 T 19970130; FR 9601527 A 19960208; US 79105197 A 19970128