

Title (en)

Gap seal for airfoils of a turbomachine

Title (de)

Spaltdichtung für Schaufeln einer Turbomaschine

Title (fr)

Joint d'étanchéité pour le jeu d'aubes d'une turbomachine

Publication

**EP 1995413 B1 20100428 (DE)**

Application

**EP 08153316 A 20080326**

Priority

CH 5732007 A 20070405

Abstract (en)

[origin: US2008247867A1] A gap seal ( 9 ) radially seals a gap ( 8 ) which extends axially and radially between two blades ( 1, 2 ) of a turbomachine which are adjacent in the circumferential direction ( 3 ). The two blades ( 1, 2 ) have, in each case, an axially extending longitudinal slot ( 10, 11 ), which is open towards the gap ( 8 ), on its respective blade root ( 6, 7 ). A band-form or strip-form sealing element ( 12 ) engages with its longitudinal sides ( 13, 14 ) in the two longitudinal slots ( 10, 11 ) and bridges the gap ( 8 ). The one blade ( 1 ) has a projection ( 15 ) on its blade root ( 6 ), which projects from the blade root ( 6 ) in the circumferential direction ( 3 ) and extends in the circumferential direction ( 3 ) and radially, at least in the region of the respective longitudinal slot ( 10 ), and bridges an axial longitudinal end of the gap ( 8 ) in the process. The other blade ( 2 ) has a step-shaped recess ( 16 ) on its blade root ( 7 ), complementary to the projection ( 15 ) of the one blade ( 1 ) and in which the projection engages. The projection ( 15 ) has a transverse slot ( 17 ) which extends in the circumferential direction ( 3 ) and is open towards the gap ( 8 ). The sealing element ( 12 ) engages with an end face ( 18 ) in the transverse slot ( 17 ).

IPC 8 full level

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CPC (source: EP US)

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