

Title (en)  
TURBINE BLADE-CASCADE END WALL

Title (de)  
KASKADENENDWAND FÜR EINE TURBINENSCHAUFEL

Title (fr)  
PAROI D'EXTRÉMITÉ DE GRILLE D'AUBE DE TURBINE

Publication  
**EP 2241723 A4 20130306 (EN)**

Application  
**EP 08872470 A 20080925**

Priority  
• JP 2008067231 W 20080925  
• JP 2008030937 A 20080212

Abstract (en)  
[origin: EP2241723A1] Provided is a turbine blade cascade endwall that is capable of reducing crossflow and is capable of reducing secondary-flow loss that occurs in association with the crossflow, therefore being capable of achieving enhanced turbine performance. A convex portion (11) that is gently swollen as a whole, that has an apex (P1) at a position of 0 to 20 % pitch in a position of 5 to 25 % Cax, that gently slopes from this apex (P1) toward a downstream side and a suction side surface of an adjacently disposed turbine stationary blade (B1) or turbine moving blade, and that slopes slightly steeply from the apex (P1) toward an upstream side is provided between one turbine stationary blade (B1) or turbine moving blade and another turbine stationary blade (B1) or turbine moving blade disposed adjacent to one turbine stationary blade (B1) or turbine moving blade.

IPC 8 full level  
**F01D 9/02** (2006.01); **F01D 5/14** (2006.01); **F01D 9/04** (2006.01)

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Citation (search report)  
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• [X] US 2007258819 A1 20071108 - ALLEN-BRADLEY EUNICE [US], et al  
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• [X] ROSE M ET AL: "THE EFFECT OF END-WALL PROFILING ON SECONDARY FLOW AND LOSS DEVELOPMENT IN A TURBINE CASCADE", PROCEEDINGS OF ASME TURBO EXPO 2002, GT-2002-30339, ASME., 3 June 2002 (2002-06-03), pages 135 - 145, XP008138428  
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