

Title (en)

Airfoil with leading edge cooling

Title (de)

Kühlung der Anströmkante einer Turbomaschinenschaufel

Title (fr)

Refroidissement de l'arête amont d'une aube pour une turbomachine

Publication

EP 0924384 A3 20000823 (EN)

Application

EP 98310191 A 19981211

Priority

US 99232397 A 19971217

Abstract (en)

[origin: EP0924384A2] A hollow airfoil (16) is provided which includes a body, a trench (30), and a plurality of cooling apertures (36) disposed within the trench (30). The body extends chordwise between a leading edge (26) and a trailing edge (29), and spanwise between an outer radial surface and an inner radial surface, and includes an exterior wall surrounding a cavity (20). The trench (30) is disposed in the exterior wall along the leading edge (26), extending in a spanwise direction. <IMAGE>

IPC 1-7

F01D 5/18

IPC 8 full level

F01D 5/18 (2006.01); **F01D 9/02** (2006.01)

CPC (source: EP)

F01D 5/187 (2013.01); **F05D 2240/121** (2013.01); **F05D 2240/303** (2013.01); **F05D 2260/202** (2013.01)

Citation (search report)

- [X] US 5152667 A 19921006 - TURNER EDWARD R [US], et al
- [X] GB 2127105 A 19840404 - ROLLS ROYCE
- [A] GB 435906 A 19351001 - BBC BROWN BOVERI & CIE

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