

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 A2 19990623 (EN)**

Application  
**EP 98310191 A 19981211**

Priority  
US 99232397 A 19971217

Abstract (en)  
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  
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CPC (source: EP)  
**F01D 5/187** (2013.01); **F05D 2240/121** (2013.01); **F05D 2240/303** (2013.01); **F05D 2260/202** (2013.01)

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US7300252B2; US7997866B2; US7980819B2; US8695683B2; US8955576B2; US9650900B2; US10113433B2

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