

Title (en)  
Airfoil with cooling passage

Title (de)  
Schaufelprofil mit Kühlkanälen

Title (fr)  
Aube munie de canaux de refroidissement

Publication  
**EP 2565383 B1 20191002 (EN)**

Application  
**EP 12182433 A 20120830**

Priority  
US 201113222490 A 20110831

Abstract (en)  
[origin: EP2565383A2] An example method of manufacturing an airfoil (30) includes providing a ceramic core (64) corresponding to an interior cooling channel (42). A refractory metal core (66) is provided that corresponds to a cooling passage (46). The cores are arranged in a mold (60). An airfoil structure (30) is cast about the cores to provide a turbine engine airfoil. The turbine engine airfoil (30) includes a wall (44) providing the interior cooling channel (42) and an exterior airfoil surface (34). The cooling passage (46) is provided in the wall (44) and fluidly connects the interior cooling channel (42) to the exterior airfoil surface (34). The cooling passage (46) includes multiple inlets (48) and multiple outlets (50) respectively adjoining the interior cooling channel (42) and the exterior airfoil surface (34). At least one of a first inlet (48) and outlet (50) has a different structural flow characteristic than at least one of a second inlet and outlet (48,50).

IPC 8 full level  
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CPC (source: EP US)  
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Citation (examination)  
EP 2374996 A2 20111012 - UNITED TECHNOLOGIES CORP [US]

Cited by  
EP3246110A1; EP3406851A1; EP3650648A1; US10422232B2; US10323569B2; US10294798B2; US11339718B2; EP2956644A4; EP3460216A1; EP2971667A4; EP3650645A1; US10563517B2; US11149556B2

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