

Title (en)

Method for aluminizing serpentine cooling passages of jet engine blades

Title (de)

Verfahren zur Aluminisierung serpentinenartiger Kühlungswege von Düsentriebswerkskanten

Title (fr)

Procédé pour aluminiser les passages de refroidissement en serpentine des pales d'un turboréacteur

Publication

EP 2014785 A1 20090114 (EN)

Application

EP 07112484 A 20070713

Priority

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Abstract (en)

Disclosed herein is a method for aluminiding an internal passage of a metal substrate comprising injecting a slurry composition that comprises a powder comprising aluminum, a binder selected from the group consisting of colloidal silica, an organic resin, and a combination thereof, into the internal passage; applying compressed air to the internal passage to facilitate distribution of the slurry composition throughout the internal passage; and, heat treating the slurry composition under conditions sufficient to remove volatile components from the composition, and to cause diffusion of aluminum into a surface of the internal passage.

IPC 8 full level

C23C 10/20 (2006.01)

GPC (source: EP)

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Citation (search report)

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