

METHOD OF REPAIRING TURBINE AIRFOILS

ABSTRACT OF THE DISCLOSURE

A method for preventing the aluminizing of cooling holes and internal surfaces of an airfoil during vapor phase aluminizing. The method generally entails flowing a gas through internal cavities of the airfoil and out through the cooling holes, while the surfaces of the airfoil are aluminized by vapor phase deposition. As a result of the outward gas flow, volatile activators and aluminum compounds are prevented from flowing into the cooling holes and internal cavity, thereby preventing aluminizing of the cooling hole walls and internal surfaces of the airfoil and interactions with any oxide deposits on the surfaces of the cooling holes and internal cavities.

Figure 1