

METHOD OF REMOVING CONTAMINANTS FROM A DIFFUSION-COATED COMPONENT

ABSTRACT

A method of removing contaminants from a surface of a gas turbine engine component protected by a diffusion coating that comprises an additive layer on the surface of the component and a diffusion zone in the surface of the component. The method includes subjecting the surface containing contaminants to laser beam pulses to remove contaminants from the component such that contaminants on the surface of the component are removed without damaging or removing the diffusion zone of the diffusion coating. Methods for controlled removal of at least a portion of a thickness of a diffusion coating from a coated superalloy component are also provided.

[Figure 1]