COATED GAS TURBINE ENGINE COMPONENT REPAIR

ABSTRACT OF THE DISCLOSURE

A method of repairing a component of a gas turbine engine that includes a metallic substrate, an existing coating, and a diffusion layer formed in the metallic substrate adjacent to the coating. The method includes removing at least a portion of the existing aluminide coating, removing material forming the diffusion layer, applying a new metallic layer to the metallic substrate, and applying a new aluminide coating over the new metallic layer to form a new diffusion layer in the new metallic layer. The new metallic layer is a substantially homogeneous material that is substantially similar in chemical composition to that of the metallic substrate, and the new metallic layer forms a structural layer having a thickness selected to provide a specified contour to the component.

Figure 3.