

COATING SYSTEM FOR COMPONENTS IN NEED OF REPAIR

ABSTRACT OF THE DISCLOSURE

Methods of forming a coating system on a surface of a cobalt-based superalloy component are provided. The method includes forming a nickel-based primer layer on the surface of the cobalt-based superalloy component; forming an intermediate nickel-containing layer on the nickel-based primer layer; and heat treating the cobalt-based superalloy component to form a diffusion coating on the surface of the cobalt-based superalloy component. The intermediate nickel-containing layer includes nickel, chromium, and aluminum. Coated cobalt-based superalloy components formed from such a method are also provided.

[Figure 1]