

OXIDATION-RESISTANT COATINGS, AND RELATED ARTICLES AND PROCESSES

ABSTRACT OF THE DISCLOSURE

An oxidation-resistant coating is described, formed of an alloy containing: about 30 to about 55 atom % aluminum and about 0.5 atom % to about 3 atom % tantalum; with a balance of nickel; cobalt, iron, or combinations thereof. The coating may also include chromium and a precious metal, as well as other components, such as zirconium or molybdenum. A method for applying the oxidation-resistant coating to a substrate is also described. The substrate can be formed of superalloy material, e.g., a turbine engine component. Related articles are also disclosed.

Figure 1