

ABSTRACT

YTTRIA-STABILIZED ZIRCONIA COATING WITH A MOLTEN SILICATE RESISTANT OUTER LAYER

A turbine engine component is provided which has a substrate, a yttria-stabilized zirconia coating applied over the substrate, and a molten silicate resistant outer layer. The molten silicate resistant outer layer is formed from gadolinia or gadolinia-stabilized zirconia. A method for forming the coating system of the present invention is described.

(FIGURE 1)