

NICKEL-ALUMINIDE COATING AND COATING SYSTEMS FORMED THEREWITH

ABSTRACT OF THE DISCLOSURE

A beta-phase NiAl overlay coating (24) containing a dispersion of ceramic particles (30) and a process for depositing the overlay coating (24). If the coating (24) is used to adhere a thermal barrier coating (TBC) (26), the TBC (26) exhibits improved spallation resistance as a result of the dispersion of ceramic particles (30) having a dispersion-strengthening effect on the overlay coating (24). The overlay coating (24) contains at least one reactive element and is deposited so that the some of the reactive element deposits as the ceramic particles (30) dispersed in the overlay coating (24).

FIG. 2