REINFORCED OXIDE COATINGS

ABSTRACT

A reinforced coating may include an oxide matrix and a reinforcement. In some embodiments, the reinforcement may include at least one of SiC and Si_3N_4. The reinforced coating may be deposited over a substrate, which may include a superalloy, ceramic or ceramic matrix composite (CMC). The reinforced coating may be deposited over the substrate alone or in combination with one or more additional oxide layers and/or a bond coat. The reinforced coating may be deposited using plasma spraying, physical vapor deposition, cathodic arc deposition, chemical vapor deposition, slurry dip coating, sol-gel coating, electrophoretic deposition, or another suitable deposition process.

FIG. 1