

APPLYING BOND COAT TO ENGINE COMPONENTS USING COLD SPRAY

ABSTRACT OF THE DISCLOSURE

A process for applying a coating to a component used in an engine is provided. The process includes the steps of providing a component with at least one surface to be coated, and depositing at least one layer of powder coating material onto the at least one surface using a non-oxidizing carrier gas so that the powder coating material plastically deforms without melting and bonds to the at least one surface upon impact with the at least one surface. The process of the present invention has particular utility in applying bond coats to airfoil portions of turbine blades or vanes and to applying bond coats to combustion chamber liners.

Figure 1