

METHOD AND APPARATUS FOR REPAIRING THERMAL BARRIER COATINGS

Abstract

A method and apparatus for repairing a thermal barrier coating on components in gas turbine engines and the like. The apparatus includes a microplasma spray gun having an anode, cathode, and an arc generator for generating an electric arc between the anode and cathode. The apparatus includes a nozzle for emitting arc gas into the electric arc. The electric arc is operable for ionizing the gas to create a plasma gas stream. A powder injector injects powdered thermal barrier coating material into the plasma gas stream. Defective areas of the thermal barrier coating can be patched on the component without masking the component.

Figure 3