

CHORDWIDTH RESTORATION OF A TRAILING EDGE OF A TURBINE AIRFOIL BY LASER CLAD

ABSTRACT OF THE DISCLOSURE

A method of restoring a gas turbine engine component includes repairing a turbine airfoil along a chordwidth dimension to rebuild a trailing edge of the turbine airfoil to near original dimensions. An eroded portion of the trailing edge of the turbine airfoil is removed and a filler material is deposited onto the trailing edge to produce a laser cladding. During the laser cladding process, a barrier member is inserted into a slot that extends through the trailing edge to prevent filler material from entering the slot and to act as a heat sink to remove heat from the trailing edge during the laser cladding process.

Figure 5