METHODS TO REMOVE AN EBC FROM A SUBSTRATE AND TO REPAIR A COATED COMPONENT

ABSTRACT

A method is provided for removing an environmental barrier coating from a coated component. The method may include contacting the coated component with an etchant liquid that comprises 5% by volume to 70% by volume of hydrogen fluoride and a solvent. The hydrogen fluoride reacts with silicon oxide in a thermally grown oxide layer positioned between a bondcoat and the environmental barrier coating. The bondcoat is positioned within the coated component between a silicon-containing substrate and the thermally grown oxide layer, and the bondcoat comprises a silicon-containing material.

[Figure 1]