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(54) Title (EN): INTERMEDIATE LAYER FOR ADDED THERMAL PROTECTION AND ADHESION OF A THERMAL BARRIER LAYER TO A CERAMIC MATRIX COMPOSITE SUBSTRATE

(54) Title (FR): COUCHE INTERMÉDIAIRE POUR UNE PROTECTION THERMIQUE SUPPLÉMENTAIRE ET ADHÉSION D'UNE COUCHE BARRIÈRE THERMIQUE À UN SUBSTRAT COMPOSITE À MATRICE CÉRAMIQUE

(57) Abstract:

(EN): The present invention is directed to a component (10) including a substrate (12) of a ceramic matrix composite material (14); a thermal barrier coating layer (18) disposed over the substrate (12); and an intermediate thermal protection and 5 adhesion layer (16) between the thermal barrier coating layer (18) and the substrate (12). The intermediate layer (16) is effective to adhere the thermal barrier coating layer (18) to the substrate (12) and provide a degree of added thermal protection to the substrate (12) in the event of spallation of the thermal barrier coating layer (18).

(FR): La présente invention concerne un composant (10) comprenant un substrat (12) d'un matériau composite à matrice céramique (14) ; une couche de revêtement de barrière thermique (18) disposée sur le substrat (12) ; et une couche intermédiaire de protection thermique et une couche d'adhésion (16) entre la couche de revêtement de barrière thermique (18) et le substrat (12). La couche intermédiaire (16) est efficace pour faire adhérer la couche de revêtement de barrière thermique (18) au substrat (12) et fournir un degré de protection thermique supplémentaire au substrat (12) en cas de spallation de la couche de revêtement de barrière thermique (18).

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