

Title (en)

Method for applying a metallic adhesion layers for ceramic insulating layer on metallic articles

Title (de)

Verfahren zur Aufbringung einer metallischen Haftschrift für keramische Wärmedämmschichten auf metallische Bauteile

Title (fr)

Procédé de disposition d'une couche métallique d'adhérence pour des couches isolantes sur articles métalliques

Publication

**EP 0776985 B1 20011219 (DE)**

Application

**EP 96810768 A 19961111**

Priority

DE 19545025 A 19951202

Abstract (en)

[origin: EP0776985A1] A method of applying a metallic bonding layer for thermally sprayed ceramic heat insulating layers (6) on metallic components involves (a) applying a binder onto the degreased and oxide-free metallic surface of the substrate material (2); (b) applying metallic bonding powder (4) uniformly onto the binder; (c) applying solder powder (5), of smaller particle size than the bonding powder (4), uniformly onto the binder; and (d) drying the binder and heat treating to effect soldering. In an alternative method, an oxidation and corrosion resistant layer is produced on the cleaned metallic surface by gas-shielded plasma spraying prior to step (a), the bonding powder is a coarse powder having the same composition as this oxidation and corrosion resistant layer, step (c) is omitted and step (d) comprises drying the binder and then heat treating (solution annealing) to form a sintered bond between the metallic component and the oxidation and corrosion resistant layer and between the oxidation and corrosion resistant layer and the bonding powder. Also claimed are metallic bonding layers produced by the above methods.

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CPC (source: EP US)

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EP2034132A3; EP1867749A1; EP2460981A1; RU2763953C1; EP1491657A1; EP1491658A1; CN102127729A; DE10332938B4; US8303247B2; WO2007144217A1

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