

Title (en)

Coating for metallic substrates, method of production and use of the coating.

Title (de)

Überzug für metallische Substrate, Verfahren zur Herstellung und Verwendung des Überzugs.

Title (fr)

Couche pour substrats métalliques, procédé de fabrication et utilisation de la couche.

Publication

EP 0184985 A2 19860618 (EN)

Application

EP 85810521 A 19851107

Priority

- EP 84810608 A 19841212
- EP 84810656 A 19841227

Abstract (en)

A coating comprising aluminum and at least one of the transition metals of the groups IVB, VB and VIB are prepared comprising a unique microstructure which may be a solid solution of the transition metal in an aluminide matrix or a pseudo solid solution of the transition metal in an aluminum matrix. By means of special processes a super fine distribution of the transition metal within the matrix may be obtained in the form of a metastable pseudo solid solution even though thermodynamic considerations disfavour such fine distributions. The coating may, with advantage, be applied to superalloys and be heat treated together with the substrate in order to form a stable aluminide coating comprising transition metal dispersions in an aluminide matrix. One of the preferred manufacturing processes of such coatings is the electrodeposition thereof from non-aqueous electrolytes.

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IPC 8 full level

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Cited by

EP2465977A1; EP0461727A3; DE102007008011A1; EP1533401A1; US8778164B2; US9771661B2; US10087540B2; WO2005045102A3; WO8910336A1

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