

Title (en)

Method of producing a wear- and corrosion-resistant protective coating layer, composed of an austenitic steel alloy and so produced protective layer.

Title (de)

Verfahren zur Herstellung einer Schutzschicht mit hohem Verschleiss- und Korrosionswiderstand aus einer austenitischen Eisenbasislegierung und nach dem Verfahren hergestellte Schutzschicht.

Title (fr)

Procédé pour la fabrication d'un revêtement protecteur, résistant à l'usure et la corrosion, en alliage de fer austénitique et revêtement ainsi fabriqué.

Publication

EP 0456847 B1 19941207 (DE)

Application

EP 90109028 A 19900514

Priority

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- CH 242587 A 19870626

Abstract (en)

[origin: EP0456847A1] In a method of producing a protective layer of high wear resistance and corrosion resistance from an austenitic iron-based alloy on the surface of a component serving as the substrate by thermal spraying, the protective layer has in its final state a nitrogen content of at least 0.2% by weight. The protective layer is applied by flame-spraying, plasma-spraying, high-speed flame-spraying, arc-spraying, submerged welding or laser fusion. The starting materials are in the form of powder or wire, with or without a nitrogen content. Variants: nitriding at temperatures of 300-800 DEG C, 1-1000 bar. Simultaneous nitriding and hot-isostatic pressing for compacting the protective layer.

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IPC 8 full level

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C23C 8/26 (2013.01); **C23C 12/02** (2013.01)

Citation (examination)

- Stahlschlüssel, 1986, Seiten 336 und 367
- Handbook of Stainless Steels, McGraw-Hill Book Company, 1977, Seite 1-7 und 4-14
- Oberflächenveredeln und Plattieren von Metallen, VEB Verlag für Grundstoffindustrie 1978, Seiten 239-248
- JIS H 9301, 1977

Cited by

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EP0721997A1; US6413314B1; WO0014332A1; WO9948747A1; WO2014025244A1; WO9519240A1; WO2019168893A1; WO2013056961A1;
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