

Title (en)

A process for obtaining a protective coating for surfaces subjected to mechanical and thermal wear, and coating obtained by such process.

Title (de)

Verfahren zur Herstellung einer Schutzschicht für Oberflächen die mechanischem und thermischem Verschleiss unterworfen sind.

Title (fr)

Procédé pour obtenir un revêtement protecteur pour des surfaces soumises à l'usure mécanique et thermique et revêtement obtenu par le procédé.

Publication

**EP 0147484 A1 19850710 (EN)**

Application

**EP 83113249 A 19831230**

Priority

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Abstract (en)

The process provides for coating surfaces (2) of elements (1) of heat engines subjected to wear by sliding and oxidation with a wear layer (3), and consists of a first electro-deposition phase performed in an aqueous electrolyte with a low hydrogen discharge, of a first layer (4) of hard chrome having a thickness lying between 20 and 40  $\mu\text{m}$  and a hardness lying between 400 and 600 HV; and a second electro-deposition phase in an aqueous electrolyte based on a mixture of acids, of a second layer (5) of hard chrome over the first layer (4), having a hardness of at least 1000 HV and a maximum thickness of about 1.2 mm.

IPC 1-7

**C25D 5/14**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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- [A] DE 1521079 A1 19700514 - VOLKSWAGENWERK AG
- [A] FR 1301720 A 19620817
- [A] CHEMICAL ABSTRACTS, vol. 92, 1980, page 504, no. 118542f, Columbus, Ohio, US; & JP - A - 79 117 335 (KOBEL STEEL, LTD.) 12-09-1979

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US6296951B1; EP1624092A1; EP0972861A3; FR3032725A1; US7726121B2

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