Title (en)

Members coated with composite oxide coatings for preventing the permeation of hydrogen isotopes and a process for producing such members

Title (de)

Elemente beschichtet mit wasserstoffundurchlässigen Oxidverbundschichten und Verfahren zur Herstellung von solchen Elementen

Title (fr)

Eléments revêtus de couches d'oxydes composites imperméables à l'hydrogène et procédé de fabrication de ces éléments

Publication

EP 1236813 A2 20020904 (EN)

Application

EP 02090080 A 20020228

Priority

JP 2001058253 A 20010302

Abstract (en)

The surface of a chemical densified coating formed on the surface of a stainless steel substrate is coated or sprayed with an aqueous solution based on chromic acid and a material capable of forming an amorphous inorganic substance upon sintering or the chemical densified coating is dipped in the aqueous solution and recovered; the chemical densified coating is then sintered by heating at 250 - 750 DEG C so that the pores and cracks in the chemical densified coating are filled with the fine particles of a composite of chromium oxide and an amorphous inorganic material and that the surface of the chemical densified coating is covered with a layer of such fine particles.

IPC 1-7

C23C 28/04; C23C 4/18; C23C 30/00; C23C 20/00

IPC 8 full level

C23C 22/24 (2006.01); **C23C 18/12** (2006.01); **C23C 20/00** (2006.01); **C23C 22/82** (2006.01); **C23C 26/00** (2006.01); **C23C 28/04** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP)

C23C 18/1216 (2013.01); **C23C 18/1241** (2013.01); **C23C 26/00** (2013.01); **C23C 30/00** (2013.01)

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Designated contracting state (EPC)

DE FR IT

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EP 1236813 A2 20020904; **EP 1236813 A3 20030813**; **EP 1236813 B1 20110525**; JP 2002256450 A 20020911; JP 4863181 B2 20120125

DOCDB simple family (application)

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