

Title (en)
METHOD FOR FORMING A HARDENED SURFACE ON A SUBSTRATE

Title (de)
VERFAHREN ZUR BILDUNG EINER GEHÄRTETEN OBERFLÄCHE AUF EINEM SUBSTRAT

Title (fr)
PROCEDE DE FORMATION D'UNE SURFACE DURCIE SUR UN SUBSTRAT

Publication
EP 1749113 A4 20090415 (EN)

Application
EP 05780050 A 20050502

Priority
• US 2005015365 W 20050502
• US 84187304 A 20040506

Abstract (en)
[origin: WO2005116286A2] The invention encompasses a method of forming a metallic coating. A metallic glass coating is formed over a metallic substrate. After formation of the coating, at least a portion of the metallic glass can be converted into a crystalline material having a nanocrystalline grain size. The invention also encompasses metallic coatings comprising metallic glass. Additionally, the invention encompasses metallic coatings comprising crystalline metallic material, with at least some of the crystalline metallic material having a nanocrystalline grain size.

IPC 8 full level
C22C 33/00 (2006.01); **C22C 45/02** (2006.01); **C22C 45/10** (2006.01); **C23C 4/06** (2006.01)

CPC (source: EP KR)
C22C 33/003 (2013.01 - EP); **C22C 45/02** (2013.01 - EP); **C23C 4/06** (2013.01 - KR); **C23C 4/067** (2016.01 - EP); **C23C 24/04** (2013.01 - KR); **B82Y 30/00** (2013.01 - KR)

Citation (search report)
• [X] US 6258185 B1 20010710 - BRANAGAN DANIEL J [US], et al
• [X] US 2003051781 A1 20030320 - BRANAGAN DANIEL J [US]
• [XP] WO 2004106565 A2 20041209 - NANOSTEEL CO [US], et al
• See references of WO 2005116286A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005116286 A2 20051208; WO 2005116286 A3 20060908; AU 2005248324 A1 20051208; AU 2005248324 B2 20080828; CA 2565090 A1 20051208; CA 2565090 C 20120124; CN 1997765 A 20070711; CN 1997765 B 20120530; EP 1749113 A2 20070207; EP 1749113 A4 20090415; JP 2007536430 A 20071213; JP 4619405 B2 20110126; KR 100908937 B1 20090722; KR 20090014422 A 20090210

DOCDB simple family (application)
US 2005015365 W 20050502; AU 2005248324 A 20050502; CA 2565090 A 20050502; CN 200580022559 A 20050502; EP 05780050 A 20050502; JP 2007511510 A 20050502; KR 20097001052 A 20050502