

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 July 2006 (20.07.2006)

PCT

(10) International Publication Number
WO 2006/076130 A3

(51) International Patent Classification:

C23C 30/00 (2006.01) *C23C 16/40* (2006.01)
C23C 16/02 (2006.01) *C23C 28/02* (2006.01)

(21) International Application Number:

PCT/US2005/045927

(22) International Filing Date:

15 December 2005 (15.12.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11/012,873 15 December 2004 (15.12.2004) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

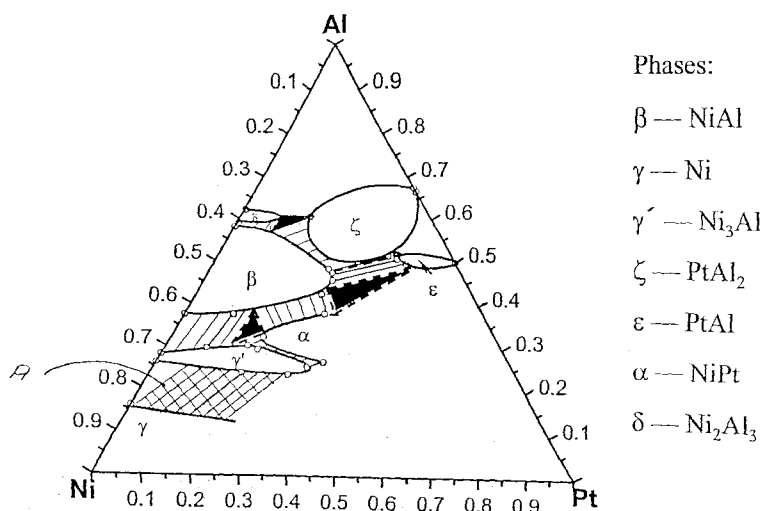
(88) Date of publication of the international search report:

26 October 2006

[Continued on next page]

(54) Title: METHODS FOR MAKING HIGH-TEMPERATURE COATINGS HAVING PT METAL MODIFIED γ -Ni + γ' -Ni₃Al ALLOY COMPOSITIONS AND A REACTIVE ELEMENT

Portion of 1100° C Ni-Al-Pt Phase Diagram



(57) Abstract: A method for making an oxidation resistant article, including (a) depositing a layer of a Pt group metal on a substrate to form a platinized substrate; and (b) depositing on the platinized substrate layer of Pt group metal a layer of a reactive element selected from the group consisting of Hf, Y, La, Ce and Zr and combinations thereof to form a surface modified region thereon, wherein the surface modified region includes the Pt-group metal, Ni, Al and the reactive element in relative concentration to provide a γ -Ni + γ' -Ni₃Al phase constitution.

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