

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 April 2007 (05.04.2007)

PCT

(10) International Publication Number
WO 2007/037447 A1

(51) International Patent Classification:

B23K 35/00 (2006.01) **C22C 38/00** (2006.01)

(21) International Application Number:

PCT/JP2006/319613

(22) International Filing Date:

25 September 2006 (25.09.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2005-282712 28 September 2005 (28.09.2005) JP
2006-136897 16 May 2006 (16.05.2006) JP

(71) Applicant (for all designated States except US): **NIPPON STEEL CORPORATION** [JP/JP]; 6-3, Otemachi 2-chome, Chiyoda-ku, Tokyo, 1008071 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KODAMA, Shinji** [JP/JP]; c/o NIPPON STEEL CORPORATION Technical Development Bureau, 20-1 Shintomi, Futtsu-shi,

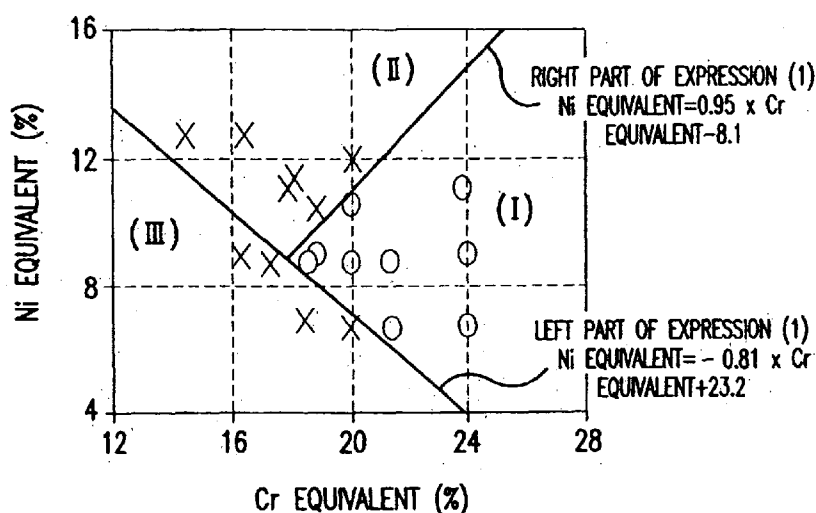
Chiba, 2938511 (JP). **HAMATANI, Hideki** [JP/JP]; c/o NIPPON STEEL CORPORATION Technical Development Bureau, 20-1 Shintomi, Futtsu-shi, Chiba, 2938511 (JP). **MIZUHASHI, Nobuo** [JP/JP]; c/o SUNWEL TECHNO SERVICE Co., Ltd., In Joint Research Center, Steel Research Laboratories, Technical Development Bureau, NIPPON STEEL CORPORATION, 20-1 Shintomi, Futtsu-shi, Chiba, 2938511 (JP). **ASAI, Kenichi** [JP/JP]; c/o NIPPON STEEL CORPORATION, 6-3, Otemachi 2-chome, Chiyoda-ku, Tokyo, 1008071 (JP). **MIZUMOTO, Manabu** [JP/JP]; c/o NIPPON STEEL & SUMIKIN WELDING Co., Ltd., In Joint Research Center, Steel Research Laboratories Technical Development Bureau, NIPPON STEEL CORPORATION, 20-1 Shintomi, Futtsu-shi, Chiba, 2938511 (JP).

(74) Agent: **KOKUBUN, Takayoshi**; 5th Floor, NBF Ikebukuro City Building, 17-8, Higashi-Ikebukuro 1-chome, Toshima-ku, Tokyo 1700013 (JP).

(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,

[Continued on next page]

(54) Title: WELD JOINT FORMED WITH STAINLESS STEEL-BASED WELD METAL FOR WELDING A ZINC-BASED ALLOY COATED STEEL SHEET



(57) Abstract: Disclosed are a weld joint and a stainless steel-based weld metal composition for the weld joint. The composition and weld joint made therefrom are suitable for welding a zinc-based alloy coated steel sheet. The weld is excellent in corrosion resistance and liquid-metal embrittlement crack resistance. This is accomplished by inhibiting liquid-metal embrittlement cracks of the stainless-steel-based weld metal when the zinc-based alloy coating steel sheet is welded using the stainless-steel-based weld metal. The weld joint comprises a welded portion of weld metal made of stainless-steel-based components, the weld metal containing in mass percent (%): C: 0.01-0.1; Si: 0.1-1; Mn: 0.5-2.5; Ni: 5-11; and Cr: 17-25, and the balance being iron and residual impurities, wherein the following expression are met: $-0.81 \times \text{Cr equivalent} + 23.2 \leq \text{Ni equivalent} \leq 0.95 \times \text{Cr equivalent} - 8.1$... (1); Ni equivalent = $\text{Ni} + 30 \times \text{C} + 0.5 \times \text{Mn} + 30 \times \text{N}$... (2); Cr equivalent = $\text{Cr} + \text{Mo} + 1.5 \times \text{Si}$... (3).



GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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

(48) Date of publication of this corrected version:

24 May 2007

(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,

(15) Information about Correction:

see PCT Gazette No. 21/2007 of 24 May 2007

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