Title (en)

CORROSION-RESISTANT STEEL EXCELLENT IN TOUGHNESS OF BASE METAL AND WELD AND PROCESS FOR PRODUCING THE SAME

Title (de)

KORROSIONSBESTÄNDIGER STAHL MIT HERVORRAGENDER GRUNDMETALL- UND SCHWEISSNAHTZÄHIGKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ACIER RESISTANT A LA CORROSION EXCELLENT EN MATIERE DE DURETE DE METAL DE BASE ET SOUDURE ET PROCEDE DE FABRICATION DUDIT ACIER

Publication

EP 1734142 A4 20070425 (EN)

Application

EP 04732471 A 20040512

Priority

- JP 2004006663 W 20040512
- JP 2004072438 A 20040315

Abstract (en)

[origin: EP1734142A1] A corrosion-resistant steel excellent in toughness of a base metal and a weld portion said steel slab contains, in % by weight, C: 0.2% or less; Si: 0.01 to 2.0%; Mn: 0.1 to 4% or less; P: 0.03% or less; S: 0.01% or less; Cr: 3 to 11%; Al: 0.1 to 2%; and N: 0.02%, and has values of 1150 or more , and 600 or more respectively for Tp and Tc expressed by the equations below using concentrations of Cr, Al, C, Mn, Cu and Ni respectively given as %Cr, %Al, %C, %Mn, %Cu and %Ni. Tp = 1601 - (34%Cr + 287%Al) + (500%C + 33%Mn + 60%Cu + 107%Ni); and Tc = 910 + 80%Al - (300%C + 80%Mn + 15%Cr + 55%Ni).

IPC 8 full level

C21D 8/02 (2006.01); **C22C 38/00** (2006.01); **C22C 38/38** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)

C21D 8/0205 (2013.01 - KR); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/38** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP KR US); C21D 8/0205 (2013.01 - EP US)

Citation (search report)

- [DX] JP H06212256 A 19940802 - NIPPON STEEL CORP
- [DX] JP H05279791 A 19931026
- [DX] JP H06179949 A 19940628 - NIPPON STEEL CORP
- [DX] JP H073388 A 19950106 - NIPPON STEEL CORP
- [X] JP H10237600 A 19980908 - SUMITOMO METAL IND
- See references of WO 2005087964A1

Cited by

RU2625510C1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1734142 A1 20061220; **EP 1734142 A4 20070425**; CA 2559843 A1 20050922; CA 2559843 C 20111011; CN 100562597 C 20091125; CN 1926256 A 20070307; JP 2005256135 A 20050922; JP 4441295 B2 20100331; KR 100831115 B1 20080520; KR 20060125898 A 20061206; US 2008274008 A1 20081106; WO 2005087964 A1 20050922

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EP 04732471 A 20040512; CA 2559843 A 20040512; CN 200480042458 A 20040512; JP 2004006663 W 20040512; JP 2004072438 A 20040315; KR 20067018823 A 20060914; US 59283604 A 20040512