

Title (en)

STEEL WITH EXCELLENT WEATHER RESISTANCE AT THE SEASIDE ATMOSPHERE, AND MANUFACTURING METHOD THEREFOR

Title (de)

STAHL MIT HERVORRAGENDER WETTERBESTÄNDIGKEIT IN MEERESNÄHE SOWIE HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ACIER A EXCELLENTE RESISTANCE AUX INTEMPERIES DANS UNE ATMOSPHERE MARINE, ET SON PROCEDE DE FABRICATION

Publication

**EP 1825014 A4 20071226 (EN)**

Application

**EP 05856389 A 20050928**

Priority

- KR 2005003213 W 20050928
- KR 20040092554 A 20041112
- KR 20040098152 A 20041126
- KR 20040109217 A 20041221
- KR 20040109218 A 20041221
- KR 20040109220 A 20041221
- KR 20040109221 A 20041221
- KR 20040109647 A 20041221

Abstract (en)

[origin: WO2006080658A1] The invention relates to steel with excellent weather resistance, and a manufacturing method therefor. According to the invention, the steel consists of up to 0.15wt% C, up to 1.0wt% Si, up to 2.0wt% Mn, 0.2 to 1.0wt% Cu, 0.2 to 5.0wt% Ni, 0.001 to 0.1 wt% Al, up to 0.03wt% P, 0.002 to 0.03wt%S, 0.001 to 0.01wt% Ca. The balance contains Fe and unavoidable impurities, and Ca, S, Al, Si contents are determined by an Equation 1  $\text{Ca}(\%)/\text{S}(\%) > 1.5\text{Al}(\%)+2\text{Si}(\%)$ . Also, the steel has at least 30wt% water-soluble CaS inclusion out of Ca-based non-metallic inclusions. The invention provides steel with excellent weather resistance in an atmosphere having a high concentration of salinity.

IPC 8 full level

**C22C 38/08** (2006.01); **C22C 1/06** (2006.01)

CPC (source: EP)

**C22C 38/06** (2013.01); **C22C 38/08** (2013.01); **C22C 38/16** (2013.01)

Citation (search report)

- [X] KR 20020041031 A 20020601 - POSCO [KR]
- [X] KR 20030055534 A 20030704 - POSCO [KR]
- [A] JP 2000355730 A 20001226 - KAWASAKI STEEL CO
- [A] JP H0813087 A 19960116 - NIPPON KOKAN KK
- [DA] JP H0551668 A 19930302 - NIPPON STEEL CORP
- See references of WO 2006080658A1

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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006080658 A1 20060803**; AT E553225 T1 20120415; EP 1825014 A1 20070829; EP 1825014 A4 20071226; EP 1825014 B1 20120411

DOCDB simple family (application)

**KR 2005003213 W 20050928**; AT 05856389 T 20050928; EP 05856389 A 20050928