

Title (en)

METHOD FOR PRODUCING EXTREMELY LOW CARBON STEEL SHEET AND EXTREMELY LOW CARBON CAST PIECE HAVING EXCELLENT SURFACE CHARACTERISTICS, WORKABILITY AND FORMABILITY

Title (de)

BLECH AUS EXTREM KOHLENSTOFFARMEM STAHL UND GUSSSTÜCK AUS EXTREM KOHLENSTOFFARMEM STAHL MIT HERVORRAGENDEN OBERFLÄCHENEIGENSCHAFTEN, HERVORRAGENDER BEARBEITBARKEIT UND VERFORMBARKEIT

Title (fr)

PROCÉDÉ DE FABRICATION D UNE FEUILLE EN ACIER À TENEUR EXTRÊMEMENT FAIBLE EN CARBONE ET OBJET MOULÉ À TENEUR EXTRÊMEMENT FAIBLE EN CARBONE PRÉSENTANT D EXCELLENTE PROPRIÉTÉS DE SURFACE, D APTITUDE AU FAÇONNAGE ET D'APTITUDE AU

Publication

EP 1852514 A4 20091111 (EN)

Application

EP 06714341 A 20060216

Priority

- JP 2006303201 W 20060216
- JP 2005041893 A 20050218
- JP 2005300096 A 20051014

Abstract (en)

[origin: EP1852514A1] A method of producing an extremely low carbon steel cast slab characterized by casting molten steel obtained by reducing the carbon concentration of the molten steel to 0.005 mass% or less, then adding Cu, Nb, and B to the molten steel, furthermore, and adjusting the concentration of dissolved oxygen in the molten steel to 0.01 mass% to 0.06 mass% and extremely low carbon steel plate comprised of steel containing C: 0.005 mass% or less, acid soluble Al: 0.005 mass% or less, and further Cu, Nb, and B, characterized in that the steel has fine oxides of a diameter of 0.5 μ m to 30 μ m dispersed in it in an amount of 1000 particles/cm² to 1,000,000 particles/cm².

IPC 8 full level

C21C 7/06 (2006.01); **B22D 1/00** (2006.01); **B22D 11/00** (2006.01); **B22D 11/115** (2006.01); **C21C 7/04** (2006.01); **C21C 7/068** (2006.01); **C21C 7/10** (2006.01); **C22C 38/00** (2006.01); **C22C 38/06** (2006.01); **C22C 38/14** (2006.01)

CPC (source: EP KR US)

B22D 11/001 (2013.01 - EP KR US); **B22D 11/115** (2013.01 - EP KR US); **C21C 7/0006** (2013.01 - EP KR US); **C21C 7/06** (2013.01 - EP KR US); **C21C 7/068** (2013.01 - EP KR US); **C21C 7/10** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/004** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP KR US); **C22C 38/12** (2013.01 - EP KR US); **C22C 38/14** (2013.01 - EP KR US); **C22C 38/16** (2013.01 - EP US)

Citation (search report)

- [X] EP 1323837 A1 20030702 - USINOR [FR]
- [X] EP 0924312 A1 19990623 - KAWASAKI STEEL CO [JP]
- See references of WO 2006088223A1

Cited by

WO2012104306A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1852514 A1 20071107; **EP 1852514 A4 20091111**; **EP 1852514 B1 20120808**; BR PI0607866 A2 20091020; BR PI0607866 B1 20140304; JP 2006257542 A 20060928; JP 4873921 B2 20120208; KR 100886046 B1 20090226; KR 20070094859 A 20070921; TW 200632112 A 20060916; TW I340173 B 20110411; US 2012261085 A1 20121018; WO 2006088223 A1 20060824

DOCDB simple family (application)

EP 06714341 A 20060216; BR PI0607866 A 20060216; JP 2005300096 A 20051014; JP 2006303201 W 20060216; KR 20077018817 A 20070817; TW 95105410 A 20060217; US 201213530946 A 20120622