

Title (en)
HIGH STRENGTH AND HIGH DUCTILITY STEEL PLATE HAVING HYPERFINE CRYSTAL GRAIN STRUCTURE PRODUCED BY SUBJECTING ORDINARY LOW CARBON STEEL TO LOW STRAIN WORKING AND ANNEALING, AND METHOD FOR PRODUCTION THEREOF

Title (de)
DURCH BEANSPRUCHUNGSARME BEARBEITUNG UND GLÜHEN VON GEWÖHNLICHEM KOHLENSTOFFARMEM STAHL HERGESTELLTE HOCHFESTE UND HOCHDUKILE STAHLPLATTE MIT HYPERFEINER KRISTALLKORNSTRUKTUR UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
PLAQUE D'ACIER HAUTE RESISTANCE A DUCTILITE ELEVEE COMPORTANT UNE STRUCTURE CRISTALLINE HYPERFINE OBTENUE PAR RECUIT ET USINAGE A FAIBLE CONTRAINTE D'UN ACIER A FAIBLE TENEUR EN CARBONE ORDINAIRE, ET SON PROCEDE DE FABRICATION

Publication
EP 1394279 A4 20040721 (EN)

Application
EP 02713191 A 20020325

Priority

- JP 0202848 W 20020325
- JP 2001090731 A 20010327

Abstract (en)
[origin: EP1394279A1] A high strength and high ductility low carbon steel having a tensile strength of 800MPa or more, an uniform elongation of 5% or more, and an elongation to failure of 20% or more which is produced by a method comprising subjecting an ordinary low carbon steel or an ordinary low carbon steel added with boron in an amount being 0.01% or less and effective for accelerating martensitic transformation to processing and heat treatment to prepare a product having coarser size of austenite crystal grains and then to water-quenching, to provide a steel product having a martensite phase in an amount of 90% or more, and subjecting the steel product to a low strain processing, specifically a cold rolling at a total rolling reduction in thickness of 20% or more and less than 80%, and to a low temperature annealing at 500 DEG C to 600 DEG C, and a method for producing said high strength and high ductility low carbon steel. <IMAGE>

IPC 1-7
C22C 38/00; **C21D 8/00**

IPC 8 full level
C21D 9/46 (2006.01); **C21D 1/26** (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/04** (2006.01); **C21D 1/25** (2006.01)

CPC (source: EP KR US)
C21D 8/02 (2013.01 - EP US); **C21D 8/0236** (2013.01 - EP US); **C21D 8/0273** (2013.01 - EP US); **C22C 38/00** (2013.01 - KR); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C21D 1/25** (2013.01 - EP US); **C21D 2201/00** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US)

Citation (search report)

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CZ308041B6; CN106435132A

Designated contracting state (EPC)
AT BE CH DE FR GB LI

DOCDB simple family (publication)
EP 1394279 A1 20040303; **EP 1394279 A4 20040721**; **EP 1394279 B1 20050824**; CN 1279203 C 20061011; CN 1500155 A 20040526; DE 60205744 D1 20050929; DE 60205744 T2 20060622; JP 2002285278 A 20021003; JP 4189133 B2 20081203; KR 20030080101 A 20031010; US 2004112484 A1 20040617; US 2007084529 A1 20070419; WO 02077310 A1 20021003

DOCDB simple family (application)
EP 02713191 A 20020325; CN 02807339 A 20020325; DE 60205744 T 20020325; JP 0202848 W 20020325; JP 2001090731 A 20010327; KR 20037012534 A 20030926; US 47154503 A 20030911; US 54853206 A 20061011