

Title (en)

STEEL ALLOY FOR A LOW ALLOY STEEL FOR PRODUCING HIGH-TENSILE SEAMLESS STEEL TUBING

Title (de)

STAHLLEGIERUNG FÜR EINEN NIEDRIG LEGIERTEN STAHL ZUR HERSTELLUNG HOCHFESTER NAHTLOSER STAHLROHRE

Title (fr)

ALLIAGE D'ACIER POUR ACIER FAIBLEMENT ALLIÉ DESTINÉ À LA FABRICATION DE TUBES D'ACIER SANS SOUDURE À HAUTE RÉSISTANCE

Publication

EP 2255021 A2 20101201 (DE)

Application

EP 09712055 A 20090123

Priority

- DE 2009000088 W 20090123
- DE 102008010749 A 20080220

Abstract (en)

[origin: WO2009103259A2] The invention relates to a steel alloy for a low alloy steel for producing high-tensile, weldable, hot-rolled seamless steel tubing, in particular construction tubing. The chemical composition (in % by mass) is: 0.15 - 0.18 % C; 0.20 - 0.40 % Si; 1.40 - 1.60 % Mn; max. 0.05 % P; max. 0.01 % S; >0.50 - 0.90 % Cr; > 0.50 - 0.80 % Mo; >0.10 - 0.15 % V; 0.60 - 1.00 % W; 0.0130 - 0.0220 % N; the remainder is made up of iron with production-related impurities; with the optional addition of one or more elements selected from Al, Ni, Nb, Ti, with the proviso that the relationship V/N has a value of between 4 and 12 and the Ni content of the steel is not more than 0.40 %.

IPC 8 full level

C22C 38/22 (2006.01)

CPC (source: EP US)

C22C 38/22 (2013.01 - EP US)

Citation (search report)

See references of WO 2009103259A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2009103259 A2 20090827; WO 2009103259 A3 20091112; AR 070612 A1 20100421; AT E522634 T1 20110915; CN 101952472 A 20110119; CN 101952472 B 20130306; DE 102008010749 A1 20090924; EP 2255021 A2 20101201; EP 2255021 B1 20110831; ES 2372801 T3 20120126; JP 2011514932 A 20110512; JP 5486515 B2 20140507; KR 101563604 B1 20151027; KR 20100122083 A 20101119; MX 2010008975 A 20101112; PL 2255021 T3 20120131; RU 2010138609 A 20120327; RU 2482211 C2 20130520; UA 100548 C2 20130110; US 20111315277 A1 20111229; US 8865061 B2 20141021

DOCDB simple family (application)

DE 2009000088 W 20090123; AR P090100558 A 20090218; AT 09712055 T 20090123; CN 200980105799 A 20090123; DE 102008010749 A 20080220; EP 09712055 A 20090123; ES 09712055 T 20090123; JP 2010547035 A 20090123; KR 20107018414 A 20090123; MX 2010008975 A 20090123; PL 09712055 T 20090123; RU 2010138609 A 20090123; UA A201011078 A 20090123; US 91845709 A 20090123