

Title (en)

WIRE ROD, HYPEREUTECTOID BAINITE STEEL WIRE, AND METHOD FOR MANUFACTURING SAME

Title (de)

WALZDRAHT, HYPEREUTEKTOIDER BAINITSTAHL DRAHT UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

FIL MACHINE, CÂBLE D'ACIER À BAINITE HYPEREUTECTOÏDE, ET PROCÉDÉ DE FABRICATION CORRESPONDANT

Publication

**EP 3056580 A1 20160817 (EN)**

Application

**EP 14851484 A 20141008**

Priority

- JP 2013211365 A 20131008
- JP 2014076938 W 20141008

Abstract (en)

A wire rod according to the present invention includes a predetermined chemical composition, wherein a metal structure includes 90 area% to 100 area% of bainite, wherein when eight test pieces having a length of 400 mm, which are obtained by dividing a wire rod having a length of 3200 mm into eight components having a same length, are manufactured, an average tensile strength TS of each test pieces satisfies a relation of "[TS]#810×[C]+475" by N/mm<sup>2</sup>, wherein a difference between a maximum value and a minimum value of the tensile strengths of each test pieces is 50 N/mm<sup>2</sup> or less, and wherein an average reduction of area RA of each test pieces satisfies a relation of "[RA]#¥-0.083×[TS]+154" by %.

IPC 8 full level

**C22C 38/00** (2006.01); **C21D 1/20** (2006.01); **C21D 1/607** (2006.01); **C21D 8/06** (2006.01); **C21D 9/52** (2006.01); **C21D 9/58** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP KR US)

**C21D 1/20** (2013.01 - EP KR US); **C21D 1/46** (2013.01 - EP US); **C21D 1/48** (2013.01 - EP US); **C21D 1/607** (2013.01 - EP KR US); **C21D 6/004** (2013.01 - EP US); **C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - EP US); **C21D 8/06** (2013.01 - EP KR US); **C21D 8/065** (2013.01 - EP US); **C21D 9/52** (2013.01 - EP KR US); **C21D 9/525** (2013.01 - EP US); **C21D 9/58** (2013.01 - EP KR US); **C22C 38/00** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP US); **C22C 38/40** (2013.01 - KR); **C22C 38/42** (2013.01 - EP KR US); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/46** (2013.01 - EP KR US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/54** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - KR); **C21D 2211/002** (2013.01 - EP US)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3056580 A1 20160817**; **EP 3056580 A4 20170726**; CN 105612269 A 20160525; CN 105612269 B 20171114; JP 6079894 B2 20170215; JP WO2015053311 A1 20170309; KR 101789949 B1 20171025; KR 20160048991 A 20160504; TW 201516162 A 20150501; TW I516611 B 20160111; US 2016244858 A1 20160825; WO 2015053311 A1 20150416

DOCDB simple family (application)

**EP 14851484 A 20141008**; CN 201480055078 A 20141008; JP 2014076938 W 20141008; JP 2015541609 A 20141008; KR 20167008667 A 20141008; TW 103135032 A 20141008; US 201415027181 A 20141008