

Title (en)

Wire rod having excellent wire drawability and its production method

Title (de)

Walzdraht mit hervorragender Drahtziehfähigkeit und Herstellungsverfahren dafür

Title (fr)

Fil-machine disposant d'une excellente aptitude à l'étirage et son procédé de production

Publication

EP 2034036 A2 20090311 (EN)

Application

EP 08014230 A 20080808

Priority

JP 2007230713 A 20070905

Abstract (en)

A wire rod, whose tensile strength after wire drawing becomes more or less 3,000 MPa, which does not cause wire breakage even if wire drawing speed is increased, which does not shorten the life time of a dice, and whose wire drawability is improved, contains C: 0.65-0.75%, Si: 0.1-0.5%, Mn: 0.1-0.6%, P: 0.015% or below (not including 0%), S: 0.015% or below (not including 0%), N: 0.004% or below (not including 0%), Al: 0.003% or below (not including 0%), O: 0.003% or below (not including 0%), the balance being iron and inevitable impurities, tensile strength (TS) being 960 MPa or below, and reduction of area (RA) being 40% or above.

IPC 8 full level

C22C 38/02 (2006.01); **B21C 1/00** (2006.01); **C21D 8/06** (2006.01); **C21D 9/52** (2006.01); **C22C 38/00** (2006.01); **C22C 38/04** (2006.01); **D07B 1/06** (2006.01)

CPC (source: EP KR)

B21C 1/003 (2013.01 - EP); **C21D 8/065** (2013.01 - EP); **C21D 9/525** (2013.01 - EP); **C22C 38/002** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **D07B 1/066** (2013.01 - EP); **H01B 1/02** (2013.01 - KR)

Citation (applicant)

- JP 2004137597 A 20040513 - KOBE STEEL LTD
- JP 2005206853 A 20050804 - KOBE STEEL LTD [JP]
- JP 2006200039 A 20060803 - KOBE STEEL LTD

Cited by

EP3150738A4; EP3015563A4; US8859095B2; US9322075B2; US10174399B2

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2034036 A2 20090311; **EP 2034036 A3 20101006**; **EP 2034036 B1 20131211**; CN 101381840 A 20090311; CN 101381840 B 20110914; JP 2009062574 A 20090326; JP 5241178 B2 20130717; KR 101050008 B1 20110719; KR 20090025158 A 20090310

DOCDB simple family (application)

EP 08014230 A 20080808; CN 200810130883 A 20080821; JP 2007230713 A 20070905; KR 20080087029 A 20080904