

Title (en)
WIRE ROD

Title (de)
WALZDRAHT

Title (fr)
FIL MACHINE

Publication
EP 3988678 A4 20220706 (EN)

Application
EP 20827854 A 20200619

Priority
• JP 2019113720 A 20190619
• JP 2020024248 W 20200619

Abstract (en)
[origin: EP3988678A1] This wire rod has a predetermined chemical composition, satisfies the following (1) to (3), contains a pearlite structure having 90% or more of a metal structure, and satisfies the following (4) in a case in which a value of a Vickers hardness at a surface layer portion for each sample is HV_{si} with respect to each of eight samples si collected at arbitrary equal intervals in a longitudinal direction of the wire rod, and an average value and maximum value of HV_{si} are respectively Hv_{siave} and Hv_{simax} : $Cu/Ni > 1.001.70 \leq Y1 \leq 4.50$ $Y1 = 3 \times Cr + 5 \times Mn + Cu + Ni$ $Y2 < 1.81$ $Y2 = C + Si/10 + AA$ satisfies $A = a$ in a case in which a value of $a = 350 \times ([N] - 0.29 \times [Ti])$ satisfies $a \geq 0$, and $A = 0$ in a case in which the value satisfies $a < 0$ $Hvsimax - Hvsiaive \leq 50$.

IPC 8 full level
C21D 8/06 (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/42** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01); **C21D 1/32** (2006.01); **C21D 1/46** (2006.01); **C21D 1/48** (2006.01); **C21D 1/56** (2006.01); **C21D 1/607** (2006.01)

CPC (source: CN EP)
C22C 38/001 (2013.01 - CN); **C22C 38/002** (2013.01 - CN EP); **C22C 38/005** (2013.01 - CN EP); **C22C 38/008** (2013.01 - CN EP); **C22C 38/02** (2013.01 - CN EP); **C22C 38/04** (2013.01 - CN EP); **C22C 38/06** (2013.01 - CN); **C22C 38/08** (2013.01 - CN EP); **C22C 38/12** (2013.01 - CN EP); **C22C 38/14** (2013.01 - CN EP); **C22C 38/16** (2013.01 - CN EP); **C22C 38/34** (2013.01 - CN); **C22C 38/40** (2013.01 - CN); **C22C 38/42** (2013.01 - CN EP); **C22C 38/44** (2013.01 - CN); **C22C 38/46** (2013.01 - CN); **C22C 38/48** (2013.01 - CN); **C22C 38/50** (2013.01 - CN EP); **C22C 38/54** (2013.01 - CN EP); **C21D 1/32** (2013.01 - EP); **C21D 1/46** (2013.01 - EP); **C21D 1/48** (2013.01 - EP); **C21D 1/56** (2013.01 - EP); **C21D 1/607** (2013.01 - EP); **C21D 8/065** (2013.01 - EP); **C21D 2211/009** (2013.01 - EP)

Citation (search report)
• [A] EP 3327162 A1 20180530 - NIPPON STEEL & SUMITOMO METAL CORP [JP], et al
• [A] JP 2009280836 A 20091203 - NIPPON STEEL CORP
• [A] EP 3327161 A1 20180530 - NIPPON STEEL & SUMITOMO METAL CORP [JP], et al
• [A] EP 3103891 A1 20161214 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• [A] EP 3366802 A1 20180829 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• See references of WO 2020256140A1

Designated contracting state (EPC)
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