

Title (en)  
STEEL WIRE MATERIAL

Title (de)  
STAHLDRAHTMATERIAL

Title (fr)  
MATÉRIAU DE FIL D'ACIER

Publication  
**EP 3150738 A1 20170405 (EN)**

Application  
**EP 15803111 A 20150602**

Priority  
• JP 2014114429 A 20140602  
• JP 2015065897 W 20150602

Abstract (en)  
A steel wire rod includes, as a chemical composition, C, Si, Mn, Cr, Al, N, P, S, and optionally includes one or more selected from the group consisting of Mo, V, Ti, Nb, and B, and a remainder of Fe and impurities; in which a metallographic structure includes a pearlite and an area ratio of the pearlite is 85% or more; the average lamellar spacing of the pearlite is 50 nm to 100 nm; and when the Si content is represented by [%Si] by mass%, the Cr content in a cementite in the pearlite is represented by [%Cr<sub>c</sub>] by mass%, and the Cr content in a ferrite in the pearlite is represented by [%Cr<sub>f</sub>] by mass%, [%Si], [%Cr<sub>c</sub>], and [%Cr<sub>f</sub>] satisfy the following expression " $(\frac{[\%Cr_c]}{[\%Cr_f]})^{\#} \times (2.0 + [\%Si] \times 10)$ ".

IPC 8 full level  
**C21D 8/06** (2006.01); **C21D 9/52** (2006.01); **C22C 38/00** (2006.01); **C22C 38/32** (2006.01)

CPC (source: EP KR)  
**C21D 8/06** (2013.01 - EP KR); **C21D 9/52** (2013.01 - EP KR); **C22C 38/00** (2013.01 - EP); **C22C 38/001** (2013.01 - KR); **C22C 38/02** (2013.01 - EP KR); **C22C 38/04** (2013.01 - EP KR); **C22C 38/06** (2013.01 - KR); **C22C 38/16** (2013.01 - EP); **C22C 38/18** (2013.01 - EP KR); **C22C 38/20** (2013.01 - EP); **C22C 38/22** (2013.01 - EP); **C22C 38/26** (2013.01 - EP); **C22C 38/28** (2013.01 - EP); **C22C 38/32** (2013.01 - EP KR); **C22C 38/40** (2013.01 - EP); **C22C 38/54** (2013.01 - EP); **C21D 2211/009** (2013.01 - KR)

Cited by  
EP3228721A4

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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)  
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**EP 15803111 A 20150602**; CN 201580028871 A 20150602; JP 2015065897 W 20150602; JP 2016525185 A 20150602; KR 20167033721 A 20150602