

Title (en)  
HIGH STRENGTH STEEL WIRE

Title (de)  
HOCHFESTER STAHL DRAHT

Title (fr)  
FIL D'ACIER À HAUTE RÉSISTANCE

Publication  
**EP 3492616 A4 20200108 (EN)**

Application  
**EP 17834575 A 20170728**

Priority  
• JP 2016150584 A 20160729  
• JP 2017027578 W 20170728

Abstract (en)  
[origin: EP3492616A1] A high-strength steel wire includes a predetermined chemical composition. In the high-strength steel wire, a metallographic microstructure includes a pearlite structure of not less than 95% by area, an average aspect ratio R of a pearlite block, measured in a surface layer in a cross section in an axial direction including an axis of the steel wire, is 2.0 or more, assuming that a diameter of the steel wire is D, a ratio of an average aspect ratio measured in the surface layer to an average aspect ratio measured at a position of 0.25D is 1.1 or more in the cross section in the axial direction including the axis of the steel wire, and a tensile strength of the steel wire is 1,800 MPa or more.

IPC 8 full level  
**C22C 38/00** (2006.01); **C21D 8/06** (2006.01); **C21D 9/52** (2006.01); **C22C 38/04** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP KR US)  
**C21D 8/06** (2013.01 - KR); **C21D 8/065** (2013.01 - EP); **C21D 9/52** (2013.01 - EP KR); **C22C 38/00** (2013.01 - EP); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - US); **C22C 38/008** (2013.01 - EP); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **C22C 38/16** (2013.01 - EP); **C22C 38/18** (2013.01 - EP KR); **C22C 38/20** (2013.01 - EP); **C22C 38/24** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP US); **C22C 38/28** (2013.01 - US); **C22C 38/32** (2013.01 - EP US); **C22C 38/34** (2013.01 - EP); **C22C 38/40** (2013.01 - EP); **C22C 38/42** (2013.01 - EP); **C22C 38/46** (2013.01 - EP); **C22C 38/48** (2013.01 - EP); **C22C 38/50** (2013.01 - EP); **C22C 38/54** (2013.01 - EP); **C21D 8/06** (2013.01 - EP); **C21D 2211/009** (2013.01 - EP US)

Citation (search report)  
• [Y] WO 2015186801 A1 20151210 - NIPPON STEEL & SUMITOMO METAL CORP [JP]  
• [Y] US 2013133789 A1 20130530 - OKONOGI MAKOTO [JP], et al  
• See references of WO 2018021574A1

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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

DOCDB simple family (publication)  
**EP 3492616 A1 20190605; EP 3492616 A4 20200108**; BR 112019000924 A2 20190430; CA 3031185 A1 20180201; CN 109563577 A 20190402; JP 6893212 B2 20210623; JP WO2018021574 A1 20190523; KR 20190021379 A 20190305; MX 2019000974 A 20190704; MY 197958 A 20230725; US 2020354810 A1 20201112; WO 2018021574 A1 20180201

DOCDB simple family (application)  
**EP 17834575 A 20170728**; BR 112019000924 A 20170728; CA 3031185 A 20170728; CN 201780043855 A 20170728; JP 2017027578 W 20170728; JP 2018530444 A 20170728; KR 20197002093 A 20170728; MX 2019000974 A 20170728; MY PI2019000401 A 20170728; US 201716320459 A 20170728