

Title (en)  
WIRE ROD FOR SPRINGS WITH EXCELLENT CORROSION FATIGUE RESISTANCE, STEEL WIRE, AND MANUFACTURING METHOD THEREOF

Title (de)  
WALZDRAHT FÜR FEDERN MIT HERVORRAGENDER KORROSIONSERMÜDUNGSBESTÄNDIGKEIT, STAHLDRAHT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
FIL MACHINE POUR RESSORTS À EXCELLENTE RÉSISTANCE À LA FATIGUE PAR CORROSION, FIL D'ACIER ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 3553198 A4 20191113 (EN)**

Application  
**EP 17877467 A 20171206**

Priority  
• KR 20160165185 A 20161206  
• KR 2017014232 W 20171206

Abstract (en)  
[origin: EP3553198A1] One aspect of the present invention relates to a wire rod for springs with high strength and excellent corrosion fatigue resistance, in which a combination of Cr, Cu, and Ni content is controlled to an appropriate level, the maximum depth of corrosion pits is set to be below a certain level, and fine carbides containing Mo are set to be at a certain level or greater.

IPC 8 full level  
**C22C 38/42** (2006.01); **C21D 8/06** (2006.01); **C21D 9/02** (2006.01); **C21D 9/52** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/34** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01)

CPC (source: EP KR US)  
**C21D 1/58** (2013.01 - US); **C21D 8/0226** (2013.01 - US); **C21D 8/06** (2013.01 - EP KR); **C21D 8/065** (2013.01 - EP US); **C21D 9/02** (2013.01 - EP US); **C21D 9/52** (2013.01 - EP); **C21D 9/525** (2013.01 - EP KR US); **C21D 9/5732** (2013.01 - US); **C22C 38/00** (2013.01 - EP); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/34** (2013.01 - EP KR); **C22C 38/42** (2013.01 - EP KR US); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/46** (2013.01 - EP); **C22C 38/48** (2013.01 - EP); **C22C 38/50** (2013.01 - EP); **C21D 2211/001** (2013.01 - US); **C21D 2211/004** (2013.01 - EP); **C21D 2211/005** (2013.01 - EP KR US); **C21D 2211/008** (2013.01 - KR); **C21D 2211/009** (2013.01 - EP KR US)

Citation (search report)  
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• [A] JP 2003105496 A 20030409 - DAIDO STEEL CO LTD  
• [A] KR 20140122784 A 20141021 - POSCO [KR]  
• See also references of WO 2018106016A1

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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DOCDB simple family (publication)  
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DOCDB simple family (application)  
**EP 17877467 A 20171206**; CN 201780075012 A 20171206; JP 2019526575 A 20171206; KR 20160165185 A 20161206; KR 2017014232 W 20171206; US 201716466984 A 20171206