

Title (en)
HIGH-STRENGTH STEEL WIRE

Title (de)
HOCHFESTER STAHL DRAHT

Title (fr)
FIL D'ACIER À HAUTE RÉSISTANCE

Publication
EP 3647446 A4 20210217 (EN)

Application
EP 18824446 A 20180629

Priority
• JP 2017128871 A 20170630
• JP 2018024904 W 20180629

Abstract (en)
[origin: EP3647446A1] The present invention provides a high strength drawn steel wire having a predetermined chemical composition, in which, in a cross section which includes the central axis of the drawn steel wire and which is in parallel with the central axis, the area ratio of a pearlite structure in the interior of the drawn steel wire is 90% or more, and the area ratio of the pearlite structure in a surface layer portion of the drawn steel wire is 80% or more; in which, in the entire structure of the drawn steel wire, the area ratio of a lamellar pearlite structure in which cementite has an average length of 1.0 μm or more is from 30% to 65%, and the area ratio of a fragmented pearlite structure in which cementite has an average length of 0.30 μm or less is from 20% to 50%; and in which the drawn steel wire has a tensile strength of 1,960 MPa or more.

IPC 8 full level
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CPC (source: EP KR US)
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Citation (search report)
• [X] EP 2447389 A1 20120502 - NIPPON STEEL CORP [JP]
• [A] EP 2062991 A1 20090527 - NIPPON STEEL CORP [JP]
• [A] EP 3015563 A1 20160504 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• See references of WO 2019004454A1

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