

Title (en)

Steel wire for automatic coiling and production process thereof

Title (de)

Stahldraht zum automatischen Aufwickeln und Verfahren zu seiner Herstellung

Title (fr)

Fil d'acier pour enrouler automatique et procédé pour sa fabrication

Publication

**EP 0608466 B1 19960703 (EN)**

Application

**EP 93107018 A 19930429**

Priority

JP 3492293 A 19930129

Abstract (en)

[origin: EP0608466A1] A process of producing a steel wire for automatic coiling, said process comprising the steps of: providing Ni plating having a thickness of from 1 to 5  $\mu$  m to a steel wire containing 0.15% by weight or less of carbon, 1.00% by weight or less of sulfur, 2.00% by weight or less of manganese, 6.50% by weight or more and less than 14% by weight of nickel, and from 17.00 to 20.00% by weight of chromium; coating thereon a synthetic resin containing a halogen; drawing said steel wire to a reduction of cross-sectional area of at least 60%, with adjusting the surface roughness thereof to the range of from 0.8 to 12 s. A steel wire for automatic coiling comprising a steel wire containing 0.15% by weight or less of carbon, 1.00% by weight or less of sulfur, 2.00% by weight or less of manganese, 6.50% by weight or more and less than 14% by weight of nickel, and from 17.00 to 20.00% by weight of chromium, having thereon Ni plating having a thickness of from 0.3 to 1.7  $\mu$  m and having further coated thereon a synthetic resin containing a halogen, the tensile strength of the wire being at least 160 kgf/mm<sup>2</sup> and the surface roughness thereof being from 0.8 to 12 s.

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**C25D 7/06**

IPC 8 full level

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CPC (source: EP)

**B21C 1/003** (2013.01); **B21C 9/005** (2013.01); **B21F 3/00** (2013.01)

Cited by

FR2774671A1; CN102781614A; EP1291454A1; EP0826795A1; US5989732A; US6132888A; WO2016195293A1; US9381585B2; US9490531B2; US9496618B2; WO2011108977A1

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