

Title (en)

STEEL WIRE HAVING A STRUCTURE OF THE COLD-DRAWN LOWER BAINITE TYPE; METHOD FOR PRODUCING SUCH WIRE.

Title (de)

STAHLDRAHT MIT EINEM KALTVERFORMTEN GEFÜGE DER UNTEREN ZWISCHENSTUFE UND HERSTELLUNGSVERFAHREN.

Title (fr)

FIL D'ACIER AYANT UNE STRUCTURE DE TYPE BAINITE INFÉRIEURE ECROUÏE; PROCÉDE POUR PRODUIRE CE FIL.

Publication

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Application

EP 91901457 A 19901218

Priority

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Abstract (en)

[origin: FR2656242A1] Wire presenting the following characteristics: a) it is comprised at least partly of steel having a carbon content at least equal to 0.1 % and at the most equal to 0.6 % and a boron content lower than 8 ppm; b) the steel of the wire has a structure (7) of the cold-drawn lower bainite; c) the diameter of the wire varies between 0.10 and 0.40 mm; d) the breaking resistance of the wire is at least equal to 2800 MPa; e) the elongation at rupture of the wire is at least equal to 0.4 %. The method according to the invention for producing such wire comprises the cold-drawing of a machine wire including from 28 % to 90 % of proeutectoid ferrite and from 72 % to 10 % of perlite, and carrying out a heat treatment in order to obtain a structure of the lower bainite type, and a cold-drawing on the wire, the temperature of the wire during such cold-drawing being lower than 0.3 TF, TF being the melting temperature of steel expressed in Kelvin.

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IPC 8 full level

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