

Title (en)
METHOD FOR MANUFACTURING HEAT- TREATED DEFORMED STEEL

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES WÄRMEBEHANDELTEN VERFORMTEN STAHLDRAHTES

Title (fr)
PROCEDE DE FABRICATION D'UN FIL D'ACIER DEFORME PAR TRAITEMENT THERMIQUE

Publication
EP 1402965 B1 20101201 (EN)

Application
EP 01954408 A 20010801

Priority
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Abstract (en)
[origin: EP1402965A1] Rolling/heating means (6), a four-way roll rolling machine (7) and a quenching/cooling means (8) are arranged close to each other in tandem. An untreated steel wire (W1) is quickly heated to a rolling temperature by the heating means (6) and is rolled into a deformed steel wire (W2) having a predetermined section by the four-way roll rolling machine (7). Just after this rolling, the steel wire (W2) is quenched by the quenching/cooling means (8) while applying tension by a pinch roll (9), thus form-hardening it. At this time, the pinch roll (9) is driven by a motor (9a) having a torque converter, so that the tension is hardly varied to give no size variation to the deformed steel wire. Downstream of the quenching/cooling means, there is also arranged in tandem a tempering/heating coil (10) to temper the steel wire continuously. Thus, there is manufactured at one step a heat-treated deformed steel wire quenched and heat-treated without any small curve.

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