Title (en)

METHOD OF INCREASING THE STRENGTH OF REINFORCING STEELS

Publication

EP 0185341 A3 19881005 (DE)

Application

EP 85116005 A 19851216

Priority

DD 27087884 A 19841217

Abstract (en)

[origin: EP0185341A2] The invention aims to reduce the use of alloys for the manufacture of reinforcing steels of higher strength, in particular of ribbed reinforcing steels which are produced as rolled wire in the form of ringed bundles on continuous high-output wire mills. A process for increasing the strength, in particular the yield strength, of reinforcing steels is to be developed while simultaneously ensuring good weldability and good plastic properties. According to the invention, the rolled wire is deformed in the end phase of the hot-rolling process within a preset time by a defined change in shape (reduction in cross-section) and, immediately after the deformation, very rapidly quenched to a temperature below the austenite recrystallisation temperature, but above the Ar1 transformation temperature, so that there is a very fine or incompletely recrystallised austenite structure at the start of the gamma - alpha -transformation.

IPC 1-7

C21D 8/08

IPC 8 full level

C21D 8/08 (2006.01)

CPC (source: EP)

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Citation (search report)

- [A] DE 2900271 C2 19840126
- [A] DE 2345738 C
- [A] DD 149943 A1 19810805 - GUENTHER ERNST, et al
- [A] DE 1433757 A1 19681128 - MATUSCHKA DR MONT DIPL ING BER, et al
- [A] STEEL IN THE USSR, Band 7, Nr. 8, August 1977, Seiten 464-466, London, GB; V. Y. SAVENKOV et al.: "Quenching and tempering of reinforcing steel rod at krivoi rog works"

Designated contracting state (EPC)

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EP 0185341 A2 19860625; **EP 0185341 A3 19881005**; **EP 0185341 B1 19910925**; **EP 0185341 B2 19990210**; AT E67793 T1 19911015; DD 231577 A1 19860102; DD 231577 B1 19870909; DE 3584235 D1 19911031

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