

Title (en)

STAINLESS CHROMIUM STEEL AND PROCESS FOR THE MANUFACTURE THEREOF

Publication

EP 0123054 B1 19870506 (DE)

Application

EP 84101992 A 19840225

Priority

DE 3310693 A 19830324

Abstract (en)

[origin: US4610734A] The corrosion resistant chromium steel which includes 3 to 45% chromium, 0.2 to 5% nitrogen and other elements. Its structure contains at least 50% ferromagnetic structure components. It is directly magnetizable and, at 400 DEG C., has a yield strength of $R_{p0.2} > 400$ N/mm² and, at 600 DEG C., a yield strength of $R_{p0.2} > 250$ N/mm². To produce this chromium steel, a prealloy containing at least 50% ferromagnetic structure components is nitrogen enriched under pressure, is then hot worked, then annealed at 800 DEG to 1250 DEG C. and finally cooled to room temperature. A tempering treatment at 450 DEG to 750 DEG C. may follow.

IPC 1-7

C22C 38/18

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CPC (source: EP US)

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Cited by

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US 4610734 A 19860909; AT E27005 T1 19870515; DE 3310693 A1 19841004; DE 3310693 C2 19900308; EP 0123054 A1 19841031; EP 0123054 B1 19870506; JP S59179757 A 19841012

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