

Title (en)
COLD REDUCED NON-AGING DEEP DRAWING STEEL AND METHOD FOR PRODUCING

Publication
EP 0510249 A3 19930908 (EN)

Application
EP 91114828 A 19910903

Priority
• US 69014291 A 19910423
• US 72096691 A 19910625

Abstract (en)
[origin: EP0510249A2] A cold reduced, non-aging, aluminum killed steel characterized by an elongated grain structure and having an rm value at least 1.8 produced from a slab having a reduced hot rolling temperature. A slab consisting essentially of $\leq 0.08\%$ carbon, $\leq 0.1\%$ acid sol. aluminum, $\leq 0.2\%$ manganese, all percentages by weight, the balance iron and unavoidable impurities, is hot rolled to a sheet from a temperature less than 1260 DEG C. Preferably, the slab is continuously cast from a melt consisting essentially of 0.03-0.08% acid sol. aluminum, 0.003-0.007% total nitrogen, $< 0.20\%$ manganese, wherein % acid sol. aluminum x % total nitrogen is within the range of 1×10^{-4} to 5×10^{-4} and is hot rolled from a temperature of 1093-1175 DEG C. The hot rolled sheet is descaled, cold reduced, batch annealed and temper rolled. Preferably, the cold reduced sheet is annealed in the range of 538-649 DEG C and the temper rolled sheet has a tensile strength of 284.5-313.9 N/mm² (29-32 kg/mm²), a total elongation of at least 42% and an rm value of at least 2.0.

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C21D 8/04

IPC 8 full level
C21D 8/04 (2006.01)

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C21D 8/0426 (2013.01)

Citation (search report)
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• [AD] US 4145235 A 19790320 - GONDO HISASHI, et al
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