

Title (en)

Heat treatment method for completely martensitic steel alloy

Title (de)

Wärmebehandlungsverfahren für vollmartensitische Stahllegierung

Title (fr)

Procédé de traitement thermique pour alliage d'acier complètement martensitique

Publication

EP 0866145 B1 20030507 (DE)

Application

EP 98810193 A 19980309

Priority

DE 19712020 A 19970321

Abstract (en)

[origin: EP0866145A2] A novel fully martensitic hardenable steel has the composition (by wt.) 8-15% Cr, up to 15% Co, up to 4% Mn, up to 4% Ni, up to 8% Mo, up to 6% W, 0.5-1.5% V, up to 0.15% Nb, up to 0.04% Ti, up to 0.4% Ta, up to 0.02% Zr, up to 0.02% Hf, NOTGREATER 50 ppm B, up to 0.1% C, 0.12-0.25% N, balance Fe and impurities, the sum of Mn + Ni being less than 4% and the sum of Mo + W being less than 8%. Also claimed is a heat treatment process for the above steel, comprising solution annealing at 1150-1250 degrees C for 0.5-15 hrs., cooling to room temperature and then tempering at 600-820 degrees C for 0.5-25 hrs.

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IPC 8 full level

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CPC (source: EP US)

C21D 6/002 (2013.01 - EP US); **C22C 33/0285** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/30** (2013.01 - EP US); **C21D 1/18** (2013.01 - EP US)

Cited by

EP1203831A3; EP1754798A1; EP1158067A1; DE10025808A1; US8147748B2; US6592685B2; US7985304B2; US6464804B2; WO2008119638A1; US10563293B2; US11725267B2; EP2116626A1; US7686898B2

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