

Title (en)  
Completely martensitic steel alloy

Title (de)  
Vollmartensitsche Stahllegierung

Title (fr)  
Alliage d'acier complètement martensitique

Publication  
**EP 0866145 A3 19981223 (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.

IPC 1-7  
**C22C 38/24**; **C22C 38/00**; **C21D 1/00**; **C21D 1/26**

IPC 8 full level  
**C21D 1/00** (2006.01); **C21D 1/26** (2006.01); **C21D 6/00** (2006.01); **C22C 33/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/24** (2006.01); **C22C 38/30** (2006.01); **C22C 38/58** (2006.01); **C21D 1/18** (2006.01)

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)

Citation (search report)

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