

Title (en)

Workpiece made of a high-strength steel alloy and its use

Title (de)

Werkstück aus einer hochfesten Stahllegierung und dessen Verwendung

Title (fr)

Pièce en acier à haute résistance mécanique et sa utilisation

Publication

EP 1881083 B1 20091230 (DE)

Application

EP 07014185 A 20070719

Priority

DE 102006033813 A 20060719

Abstract (en)

[origin: EP1881083A1] Workpiece made from a high strength steel alloy contains (in wt.%) 0.11-0.18 carbon, 0.10-0.30 silicon, 1.60-2.20 manganese, less than 0.0015 phosphorus, less than 0.010 sulfur, 1.00-2.00 chromium, less than 0.020 nitrogen, 0.020-0.060 niobium, 0.001-0.004 boron, 0.001-0.050 titanium and a balance of iron. A semi-finished product in the form of sheet metal or tube with a ductile ferritic-perlitic structure is heat treated by austenizing, cooling in air and then optionally tempered. The workpiece has a tensile strength Rm of more than 1.200 MPa at a fraction elongation A5 of more than 12 %.

IPC 8 full level

C22C 38/00 (2006.01)

CPC (source: EP)

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Cited by

CZ305430B6; DE102011012428B4; CN108474080A; CN114174542A; US11384415B2; WO2017085135A1; WO2018220430A1; WO2018220598A1; US11629388B2; WO2017006144A1; WO2017006159A1; EP3591079A1; EP3604564A1; US11319610B2; EP4234746A2; US11814696B2

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