

Title (en)

Process for producing a work piece of machine construction steel and work piece produced by this process

Title (de)

Verfahren zum Herstellen eines Werkstückes aus Maschinenbaustahl und nach diesem Verfahren hergestelltes Werkstück

Title (fr)

Procédé de fabrication d'une pièce en acier de construction mécanique et pièce ainsi fabriquée

Publication

EP 0717116 B1 20010613 (FR)

Application

EP 95402754 A 19951207

Priority

FR 9414941 A 19941213

Abstract (en)

[origin: EP0717116A1] Micro-alloyed steel consists of (in wt%): 0.05-0.5 C; 1-2 Mn; 0.05-1.55 Si; 0.1-1 Cr; 0-0.5 Mo; 0-0.3 V; 0-0.01 B; 0-0.03 Ti; and 0-0.1Nb. It has a bainitic structure. A blank of the steel is subjected to surface heat treatment by laser beam, induction heating or electron bombardment, followed by quenching. The heat affected zones are heated to 500-900 degrees C and cooled at a rate of above 500 degrees C/hr..

IPC 1-7

C21D 1/20

IPC 8 full level

C21D 1/00 (2006.01); **C21D 1/20** (2006.01); **C21D 1/06** (2006.01)

CPC (source: EP US)

C21D 1/00 (2013.01 - EP US); **C21D 1/20** (2013.01 - EP US); **C21D 1/06** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US)

Cited by

CN103526117A; FR2992328A1; EP0787812A1; FR2744733A1; EP2957643A1

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