

Title (en)

Method of producing highly stressed machine components

Title (de)

Verfahren zur Herstellung hochbeanspruchter Maschinenbauteile

Title (fr)

Procédé de fabrication des composants fortement chargés

Publication

EP 1681365 A1 20060719 (DE)

Application

EP 06450006 A 20060112

Priority

AT 112005 U 20050114

Abstract (en)

Steel for case-hardened highly stressed machine parts has the following chemical composition by weight percentage before case-hardening. Carbon, 0.27-.035, silicon 0.15-0.25, manganese 1.4-3.0, chromium 0.4-0.8, phosphorus no more than 0.02. Also, boron 4-55 ppm. In addition, titanium 0.035-0.05, nickel no more than 1.0, the rest being iron and melting conditioned impurities. Independent claims are included for: (a) a method for the manufacturing of a highly stressable machine part; and (b) a highly stressable machine part, especially a transmission shaft.

IPC 8 full level

C22C 38/04 (2006.01); **C21D 1/06** (2006.01); **C23C 8/44** (2006.01)

CPC (source: EP)

C21D 7/02 (2013.01); **C21D 9/28** (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C21D 1/613** (2013.01)

Citation (search report)

- [X] US 5178688 A 19930112 - YU IN-SEOK [KR], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 08 30 August 1996 (1996-08-30)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 03 31 March 1997 (1997-03-31)

Cited by

CN113981316A; US2021371947A1; ES2293837A1

Designated contracting state (EPC)

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