

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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DOCDB simple family (publication)

**AT 8065 U1 20060115**; DE 502006007937 D1 20101111; EP 1681365 A1 20060719; EP 1681365 B1 20100929

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