

Title (en)

STEEL FOR MECHANICAL PARTS, METHOD FOR PRODUCING MECHANICAL PARTS FROM SAID STEEL AND THE THUS OBTAINABLE MECHANICAL PARTS

Title (de)

STAHL FÜR MECHANISCHE TEILE, VERFAHREN ZUR HERSTELLUNG VON MECHANISCHEN TEILEN AUS DEM STAHL UND DANACH ERHÄLTLICHE MECHANISCHE TEILE

Title (fr)

ACIER POUR PIECES MECANIQUES, PROCEDE DE FABRICATION DE PIECES MECANIQUES L'UTILISANT ET PIECES MECANIQUES AINSI REALISEES

Publication

**EP 1727919 A2 20061206 (FR)**

Application

**EP 05742733 A 20050321**

Priority

- FR 2005000684 W 20050321
- FR 0403038 A 20040324

Abstract (en)

[origin: WO2005098070A2] The inventive steel for mechanical parts is characterised by the composition thereof expressed in the following percentages by weight: 0.19 % = C = 0.25 %; 1.1 % = Mn = 1.5 %; 0.8 % = Si = 1.2 %; 0.01 % = S = 0.09 %; traces = P = 0.025 %; traces = Ni = 0.25 %; 1 % = Cr = 1.4 %; 0.10 % = Mo = 0.25 %; traces = Cu = 0.30 %; 0.01 % = Al = 0.045 %; 0.010 % = Nb = 0.045 %; 0.0130 % = N = 0.0300 %; optionally traces = Bi = 0.10 % and/or traces = Pb = 0.12 % and/or traces = Te = 0.015 % and/or traces = Se = 0.030 % and/or traces = Ca = 0.0050 %. The rest being iron and impurities resulting from preparation, a chemical composition being adjusted in such a way that mean values J3m, J11m, J15m et J25m of five Jominy tests are such as alpha = | J11m - J3m x 14/22 - J25m x 8/22 | = 2.5 HRC; and ss = J3m - J15m = 9 HRC. A method for producing a mechanical part from said steel and the thus obtainable mechanical part are also disclosed.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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BR PI0508776 A 20070904; CA 2559562 A1 20051020; CA 2559562 C 20130903; CN 100519811 C 20090729; CN 1950533 A 20070418;  
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TW 200600589 A 20060101; TW I352126 B 20111111; UA 84195 C2 20080925; US 2007193658 A1 20070823; WO 2005098070 A2 20051020;  
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