

Title (en)

MECHANICAL PART MADE OF STEEL HAVING HIGH PROPERTIES AND PROCESS FOR MANUFACTURING SAME

Title (de)

MECHANISCHES TEIL AUS STAHL MIT HOHEN EIGENSCHAFTEN UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

PIÈCE MÉCANIQUE EN ACIER À HAUTES CARACTÉRISTIQUES ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2556175 A2 20130213 (FR)

Application

EP 11720141 A 20110407

Priority

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- FR 2011050781 W 20110407

Abstract (en)

[origin: WO2011124851A2] Mechanical part made of steel having high properties and process for manufacturing same. Mechanical part made of steel having high properties, characterized in that its composition, in percentages by weight, is: 0.05% = C = 0.25%; 1.2% = Mn = 2%; 1% = Cr = 2.5%; (830 - 270 C% - 90 Mn% - 70 Cr%) = 560; traces = Si = 1.5%; traces = Ni = 1%; traces = Mo = 0.5%; traces = Cu = 1%; traces = V = 0.3%; traces = Al = 0.1%; traces = B = 0.005%; traces = Ti = 0.03% traces = Nb = 0.06%; traces = S = 0.1%; traces = Ca = 0.006%; traces = Te = 0.03%; traces = Se = 0.05%; traces = Bi = 0.05%; traces = Pb = 0.1%; the balance being iron and impurities resulting from the smelting, and in that its structure is bainitic and contains at most 20% in total of martensite and/or proeutectoid ferrite and/or perlite. Process for manufacturing a mechanical part having this composition.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2011124851A2

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