

Title (en)

Calcium treated boron alloyed steel with improved machinability.

Title (de)

Mit Kalzium behandelter, Bor enthaltender Stahl mit verbesserter Zerspanbarkeit.

Title (fr)

Acier traité au calcium et contenant du bore, présentant une meilleure usinabilité.

Publication

EP 0265402 A1 19880427 (EN)

Application

EP 87850292 A 19870928

Priority

FI 863918 A 19860929

Abstract (en)

The invention concerns a calcium-treated steel alloy, wherein the hardenability effect of boron is combined with an improved machinability. The chemical composition of the steel in percentages by weight is 0.01 - 0.5% carbon, 0.01 - 2.0% silicon, 0.4 - 1.6% manganese, 0.01 - 0.3% sulphur, 0 - 2.0% chromium, 0 - 0.8% molybdenum, 0.002 - 0.02% boron, 0 - 0.015% titanium, 0.005 - 0.014% aluminium, 0.0015 - 0.01% calcium and in addition $B = (0.5 - 2) \times (N - Ti/3.4)$, wherein B is the boron content, N the nitrogen content and Ti the titanium content in percentages by weight.

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C22C 38/60; **C22C 38/00**

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP)

C22C 38/002 (2013.01); **C22C 38/60** (2013.01)

Citation (search report)

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