

Title (en)

Ti(C,N)-(Ti,Nb,W)(C,N)-Co alloy for super-finishing turning cutting tool applications

Title (de)

Ti(C,N)-(Ti,Nb,W)(C,N)-Co Legierung für Drehwerkzeuge zur Feinstbearbeitung in spanabhebender Fertigung

Title (fr)

Ti(C,N)-(Ti,Nb,W)(C,N)-Co pour outils de coupe pour super finition en tournage

Publication

EP 1422306 A3 20060412 (EN)

Application

EP 03445110 A 20031010

Priority

SE 0203407 A 20021119

Abstract (en)

[origin: EP1422306A2] The present invention relates to a titanium based carbonitride alloy containing Ti, Nb, W, C, N and Co for metal cutting applications, in particularly superfinishing turning operations. The alloy contains in addition to Ti 3-<9 at% Co with only impurity levels of Ni and Fe, 2-<4 at% Nb, 3-8 at% W and has a C/(C+N) ratio of 0.50-0.75. The amount of undissolved Ti(C,N) cores (A) should be kept between 26 and 37 vol% of the hard constituents, the balance being one or more complex carbonitrides (B) containing Ti, Nb and W. The invented alloy is particularly useful for superfinishing of steel and cast iron.

IPC 8 full level

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- [A] EP 1052300 A1 20001115 - SANDVIK AB [SE]
- [DA] EP 1052297 A1 20001115 - SANDVIK AB [SE]

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