

Title (en)  
Cold work steel for powder metallurgical production of parts

Title (de)  
Kaltarbeitsstahllegierung zur pulvermetallurgischen Herstellung von Teilen

Title (fr)  
Acier d'ecrouissage pour la fabrication des composants selon la technique de la metallurgie des poudres

Publication  
**EP 1249512 B1 20060927 (DE)**

Application  
**EP 02450076 A 20020404**

Priority  
AT 5872001 A 20010411

Abstract (en)  
[origin: EP1249512A1] Steel alloy contains carbon (in wt.%) (2.05-2.65), silicon (up to 2), manganese (up to 2), chromium (6.1-9.8), tungsten (0.5-2.4), molybdenum (2.15-4.7), vanadium (7.05-9), niobium (0.25-2.45), cobalt (up to 10), sulfur (up to 0.3), nitrogen (0.04-0.22), nickel (up to 1.5), oxygen (less than 100 ppm) and iron (balance) and non-metallic inclusions with maximum k0 value of 3 according to DIN 50602. <??>The cold work steel alloy contains carbon (in wt.%) (2.05-2.65), silicon (up to 2), manganese (up to 2), chromium (6.1-9.8), tungsten (0.5-2.4), molybdenum (2.15-4.7), vanadium (7.05-9), niobium (0.25-2.45), cobalt (up to 10), sulfur (up to 0.3), nitrogen (0.04-0.22), nickel (up to 1.5), other elements (up to 2.6), oxygen (less than 100 ppm), iron and impurities (remainder) and non-metallic inclusions having k0 value of maximum of 3 according to DIN 50602. The steel alloy is used for forming component with high degree of toughness, hardness and resistance to wear and material fatigue. <??>An Independent claim is included for manufacture of tool or component, by powder metallurgy.

IPC 8 full level  
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CPC (source: EP KR US)  
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Cited by  
DE102005020081A1; CN105384008A; CN100413988C; EP2233596A1; US9993858B2; US9410230B2

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