

Title (en)
POWDER METALLURGICALLY MANUFACTURED STEEL, A TOOL COMPRISING THE STEEL AND A METHOD FOR MANUFACTURING THE TOOL

Title (de)
PULVERMETALLURGISCH HERGESTELLTER STAHL, DEN STAHL UMFASSENDES WERKZEUG UND VERFAHREN ZUR HERSTELLUNG DES WERKZEUGS

Title (fr)
ACIER FABRIQUE A L'AIDE DE LA METALLURGIE DES POUDRES, OUTIL COMPRENANT CET ACIER ET PROCEDE DE FABRICATION DE CET OUTIL

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Application
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Abstract (en)
[origin: WO2007021243A1] A steel that has been manufactured powder metallurgically and that is characterised by having a chemical composition containing, in % by weight, 1.1-2.3 C+N, 0.1-2.0 Si, 0.1-3.0 Mn, max 20 Cr, 5-20 (Mo+W/2), 0-20 Co, where the total contents of niobium and vanadium (Nb + V) is balanced in relation to the ratio between the contents of niobium and vanadium (Nb/V), such that the contents of these elements and the ratio them between lie within an area that is defined by the coordinates A, B, C in the system of coordinates in Fig. 1, where A: [4.0; 0.55], B: [4.0; 4.0], C: [7.0; 0.55], and no more than 1 % in total of Cu, Ni, Sn, Pb, Ti, Zr, and Al, balance iron and unavoidable impurities from the manufacturing of the steel. The invention also relates to tools for hot working or chip removal or cold working, or an advanced machine element manufactured from the steel, as well as a method for the manufacturing of such.

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