Title (en)

CORROSION-RESISTANT COLD-WORKED STEEL AND COMPOSITE CONTAINING A MATRIX OF THIS COLD-WORKED STEEL AND A HARD MATERIAL

Publication

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Application

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Priority

DE 3815833 A 19880509

Abstract (en)

[origin: EP0341643A1] The subject of the invention is a corrosion-resistant cold-working steel, formed by hot isostatic pressing of prealloyed powder of the composition (in percent by weight) 2.0-3.5 C, 0-1.5 Si, 0-1.5 Mn, 23.0-27.0 Cr, 0.5-2.5 Mo, 3.0-6.0 V, the remainder being Fe and unavoidable impurities, and a composite of a steel matrix and a sintered material, formed by hot isostatic pressing of a powder mixture consisting of 60 to 90% by volume of a prealloyed powder of sinterable cold-working steel matrix of the composition (in percent by weight) 2.0-3.5 C, 0-1.5 Si, 0-1.5 Mn, 23.0-27.0 Cr, 0.5-2.5 Mo, 3.0-6.0 V, the remainder being Fe and unavoidable impurities, and 40 to 10% by volume of a powder of one of the sintered materials TiC, Al2O3, B4C, VC or a mixture of two or more of these sintered materials.

IPC 1-7

C22C 33/02; C22C 38/24; C22C 38/36

IPC 8 full level

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CPC (source: EP)

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Cited by

DE4235148C1; US5290507A; US5900560A; US7771289B2; EP0789086A3; US5936169A; US5679908A; WO9221783A1; WO03069004A1; US7591745B2; US7803072B2; US8025979B2; US7320832B2; US7824774B2; US7910224B2; US8129034B2

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