

Title (en)

Use of a steel alloy in a hot-forming and press-hardening

Title (de)

Verwendung einer Stahllegierung in einem Warmform- und Presshärteprozess

Title (fr)

Utilisation d'un alliage d'acier pour emboutissage à chaud et trempe dans la presse

Publication

EP 2341156 A1 20110706 (DE)

Application

EP 10016155 A 20101229

Priority

DE 102010003997 A 20100104

Abstract (en)

Use of a steel alloy comprising a composition of carbon (0.15-0.35 wt.%), manganese (0.8-2.5 wt.%), silicon (1.5-2.5 wt.%), chromium (maximum 0.4 wt.%), aluminum (maximum 0.1 wt.%), nickel (maximum 0.3 wt.%), boron (0.0008-0.005 wt.%), titanium (0.005-0.1 wt.%), niobium (maximum 0.1 wt.%) and balance of iron and unavoidable impurities in a hot forming process and press hardening process, is claimed. An independent claim is included for a hot molding component and press-hardening component comprising the steel alloy.

Abstract (de)

Es wird eine Stahlsorte für die Verwendung in einem Warmform- und Presshärteprozess vorgeschlagen, die sich in Gewichtsprozent zusammensetzt aus: C 0,15 % # C < 0,35 % Mn 0,8 - 2,5 % Si 1,5 - 2,5 % Cr max. 0,4 % Al max. 0,1 % Ni max. 0,3 % B 0,0008 - 0,005 % Ti 0,005-0,1 % Nb max. 0,1 % Rest Eisen und unvermeidbare Verunreinigungen sowie ein warmgeformtes und pressgehärtetes Bauteil aus dieser Stahlsorte.

IPC 8 full level

C21D 8/04 (2006.01); **C21D 1/673** (2006.01); **C21D 8/02** (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/14** (2006.01)

CPC (source: EP US)

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