

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 B1 20170329 (DE)**

Application

**EP 10016155 A 20101229**

Priority

DE 102010003997 A 20100104

Abstract (en)

[origin: EP2341156A1] 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.

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)

**C21D 1/673** (2013.01 - EP US); **C21D 8/0205** (2013.01 - EP US); **C21D 9/0068** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US)

Cited by

EP2765014A1; DE102019130381A1; EP2735620A4; EP2995691A1; US11344941B2; US11761069B2; WO2022189606A1; EP2728027B1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 2341156 A1 20110706**; **EP 2341156 B1 20170329**; DE 102010003997 A1 20110707; US 2011182765 A1 20110728

DOCDB simple family (application)

**EP 10016155 A 20101229**; DE 102010003997 A 20100104; US 98080510 A 20101229