

Title (en)

METHOD FOR NITRIDING A COMPONENT

Title (de)

VERFAHREN ZUM NITRIEREN EINES BAUTEILS

Title (fr)

PROCÉDÉ DE NITRURATION D'UN ÉLÉMENT DE CONSTRUCTION

Publication

EP 3322833 B1 20200812 (DE)

Application

EP 16733080 A 20160629

Priority

- DE 102015213068 A 20150713
- EP 2016065124 W 20160629

Abstract (en)

[origin: WO2017009044A1] The invention relates to a method for nitriding a component (6) composed of a metal material (W) that contains iron as a base metal, wherein, in a first nitriding phase (D1), the component (6) is heated to at least 450 °C and a nitrogen-delivering process gas and/or process gas mixture (7) is provided at the surface (8) of the component such that nitrogen diffuses through the surface (8), wherein a compound layer (V) containing iron nitride is formed in the first nitriding phase (D1), wherein the compound layer (V) is dissolved by heat treatment in a first decomposition phase (E1).

IPC 8 full level

C23C 8/26 (2006.01); **C21D 1/06** (2006.01); **C21D 1/74** (2006.01); **C21D 1/76** (2006.01); **C21D 3/08** (2006.01)

CPC (source: EP)

C21D 1/06 (2013.01); **C21D 1/74** (2013.01); **C21D 1/76** (2013.01); **C21D 3/08** (2013.01); **C23C 8/26** (2013.01)

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)

WO 2017009044 A1 20170119; BR 112017028323 A2 20180911; CN 107849678 A 20180327; DE 102015213068 A1 20170119; EP 3322833 A1 20180523; EP 3322833 B1 20200812

DOCDB simple family (application)

EP 2016065124 W 20160629; BR 112017028323 A 20160629; CN 201680041599 A 20160629; DE 102015213068 A 20150713; EP 16733080 A 20160629