

Title (en)  
METHOD FOR PRODUCING TITANIUM-ALUMINUM COMPONENTS

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON TIAL-BAUTEILEN

Title (fr)  
PROCÉDÉ DE FABRICATION DE PIÈCES EN TIAL

Publication  
**EP 3077557 B1 20171025 (DE)**

Application  
**EP 14828000 A 20141125**

Priority  
• DE 102013020460 A 20131206  
• DE 2014000598 W 20141125

Abstract (en)  
[origin: WO2015081922A1] The invention relates to a method for producing a component from a titanium-aluminum base alloy. The component is intended in particular as a component for turbocharger units of internal combustion engines. The method comprises the following steps: heating cast starting material within the ( $\alpha$ + $\beta$ ) phase region to a temperature at which the  $\beta$  phase has at least 5 vol%, forging the heated starting material into a forged blank by means of impact forming at a rate of form change of  $\geq 19$  1/s, wherein the forged blank has no burrs after the forging, removing the forged blank from the die and cooling the forged blank in a controlled, even manner, wherein the forged blank has a proportion of  $\beta$ /B2 Ti phase of at most 10 vol% after the cooling to room temperature, and further processing the forged blank into the final product.

IPC 8 full level  
**C22C 14/00** (2006.01); **C22F 1/18** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP)  
**C22C 14/00** (2013.01); **C22F 1/183** (2013.01); **F05D 2220/40** (2013.01); **F05D 2230/25** (2013.01); **F05D 2300/174** (2013.01); **F05D 2300/60** (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 2015081922 A1 20150611**; **WO 2015081922 A9 20151022**; DE 102013020460 A1 20150611; EP 3077557 A1 20161012; EP 3077557 B1 20171025

DOCDB simple family (application)  
**DE 2014000598 W 20141125**; DE 102013020460 A 20131206; EP 14828000 A 20141125