

Title (en)  
Case hardening titanium and its alloys

Title (de)  
Gehäusehärtendes Titanium und seine Legierungen

Title (fr)  
Titane de durcissement superficiel et ses alliages

Publication  
**EP 2154263 A1 20100217 (EN)**

Application  
**EP 09251856 A 20090723**

Priority  
GB 0813667 A 20080725

Abstract (en)  
An article of titanium or a titanium-based alloy is case hardened by heat treatment at a temperate of 750°C to 850°C and at a pressure in the order of atmospheric pressure in a diffusion atmosphere. The diffusion atmosphere comprises a carrier gas such as argon which does not react chemically with the article the said temperature range and carbon monoxide. The concentration of carbon monoxide in the oxygen diffusion atmosphere is in the range of 20 volumes per million to 400 volumes per million.

IPC 8 full level  
**C22F 1/18** (2006.01); **C23C 8/06** (2006.01); **C23C 8/16** (2006.01)

CPC (source: EP US)  
**C21D 1/76** (2013.01 - EP US); **C22F 1/183** (2013.01 - EP US); **C23C 8/16** (2013.01 - EP US)

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Designated contracting state (EPC)  
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 SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2154263 A1 20100217**; CA 2673897 A1 20100125; GB 0813667 D0 20080903; US 2010139812 A1 20100610

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