

Title (en)
Method for surface hardening a Ti alloy

Title (de)
Verfahren zur Oberflächenhärtung einer Ti-Legierung

Title (fr)
Procédé pour la durcissement de la surface d'un alliage de Ti

Publication
EP 1288328 A1 20030305 (EN)

Application
EP 02290753 A 20020327

Priority
JP 2001265462 A 20010903

Abstract (en)
Ti alloy is heated in an atmosphere of CO₂ in a heating furnace. O and C atoms are introduced into the Ti alloy to harden it without forming Ti oxide, thereby increasing hardness by Ti-O and Ti-C solid solutions thus formed.

IPC 1-7
C23C 8/16; C23C 8/28

IPC 8 full level
C23C 8/28 (2006.01)

CPC (source: EP KR US)
C23C 8/28 (2013.01 - EP KR US)

Citation (search report)
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• [XY] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 08 30 August 1996 (1996-08-30)
• [X] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 07 31 August 1995 (1995-08-31)

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CN106337161A; US7422804B2; WO2005075698A1

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EP 1288328 A1 20030305; CN 1407127 A 20030402; JP 2003073799 A 20030312; KR 20030020228 A 20030308; US 2003041922 A1 20030306

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EP 02290753 A 20020327; CN 02106048 A 20020410; JP 2001265462 A 20010903; KR 20020023627 A 20020430; US 10933802 A 20020328