

Title (en)
METHOD FOR DEOXIDIZING Ti-Al ALLOY

Title (de)
VERFAHREN ZUM DESOXIDIEREN EINER TITAN-ALUMINIUM-LEGIERUNG

Title (fr)
PROCÉDÉ DE DÉSOXYDATION D'UN ALLIAGE Ti-Al

Publication
EP 3190196 A4 20180328 (EN)

Application
EP 15838357 A 20150902

Priority

- JP 2014180431 A 20140904
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- JP 2015006765 A 20150116
- JP 2015131029 A 20150630
- JP 2015074970 W 20150902

Abstract (en)
[origin: EP3190196A1] A Ti-Al alloy having an Al content of at least 40% by mass, said alloy being produced using an alloy material comprising a titanium material and an aluminum material and having a total oxygen content of at least 0.1 % by mass, is melted and held in an atmosphere of at least 1.33 Pa according to a melting process incorporating a water-cooled copper vessel, thereby reducing the oxygen content of the Ti-Al based alloy.

IPC 8 full level
C22B 9/04 (2006.01); **C22B 9/10** (2006.01); **C22B 9/20** (2006.01); **C22C 1/02** (2006.01); **C22C 14/00** (2006.01); **C22C 21/00** (2006.01)

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Citation (search report)

- [A] JP H11293433 A 19991026 - GEN ELECTRIC
- [A] EP 0935006 A1 19990811 - HITCHINER MANUFACTURING CO [US]
- [X] JINGJIE GUO ET AL: "Evaporation behavior of aluminum during the cold crucible induction skull melting of titanium aluminum alloys", METALLURGICAL AND MATERIALS TRANSACTIONS B, SPRINGER-VERLAG, NEW YORK, vol. 31, no. 4, 1 August 2000 (2000-08-01), pages 837 - 844, XP019697088, ISSN: 1543-1916
- [A] MAEDA M ET AL: "Activity of aluminum in molten Ti-Al alloys", MATERIALS SCIENCE AND ENGINEERING: A, ELSEVIER, AMSTERDAM, NL, vol. 239-240, 1 December 1997 (1997-12-01), pages 276 - 280, XP027362289, ISSN: 0921-5093, [retrieved on 19971201]
- See references of WO 2016035824A1

Designated contracting state (EPC)
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