

Title (en)

HEAT RESISTANT ALUMINUM ALLOY, AND METHOD FOR MANUFACTURING SAME

Title (de)

WÄRMEBESTÄNDIGE ALUMINIUMLEGIERUNG UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

ALLIAGE D'ALUMINIUM THERMORÉSISTANT ET PROCÉDÉ DE FABRICATION CORRESPONDANT

Publication

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Application

EP 10735996 A 20100125

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- KR 20090006689 A 20090128
- KR 20090006691 A 20090128
- KR 20090006692 A 20090128
- KR 20090006693 A 20090128
- KR 20090006694 A 20090128
- KR 20090006697 A 20090128
- KR 20090006698 A 20090128

Abstract (en)

[origin: EP2383358A2] Disclosed is a heat-resistant aluminum alloy including aluminum and two types of alloy elements which are combined while forming a homogeneous solid solution reinforcing phase. The disclosed heat-resistant aluminum alloy includes the alloy elements that form a homogeneous solid solution and do not have a solvus line with respect to aluminum as a matrix metal and, therefore, the formed homogeneous solid solution reinforcing phase does not react with aluminum even at a temperature up to 300°C, thus not becoming coarse or undergoing phase decomposition. Consequently, the disclosed aluminum alloy may have remarkably enhanced heat resistance.

IPC 8 full level

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Citation (search report)

- [X] MONDOLFO, L.F.: "ALUMINUM ALLOYS: STRUCTURE AND PROPERTIES", 1 January 1976, BUTTERWORTHS, LONDON, UK, ISBN: 978-0-408-70680-5, pages: 478,483, XP002777574
- [I] MOLDOVAN P ET AL: "Microscopic study regarding the microstructure evolution of the 8006 alloy in the plastic deformation process", JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, ELSEVIER, NL, vol. 153-154, 10 November 2004 (2004-11-10), pages 408 - 415, XP027526956, ISSN: 0924-0136, [retrieved on 20041210]

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