Title (en)

Highly corrosion-resistant amorphous aluminum alloy.

Title (de)

Hochkorrosionsbeständige amorphe Alumimiumlegierung.

Title (fr)

Alliage amorphe d'aluminium à haute résistance à la corrosion.

Publication

EP 0556808 A1 19930825

Application

EP 93102487 A 19930217

Priority

JP 2936592 A 19920217

Abstract (en)

A highly corrosion resistant amorphous aluminum alloy which consists of more than 7 to not more than 55 atomic %, in total, of Cr, at least one element selected from the group consisting of Mo and W, at least one element selected from the group consisting of Ta, Nb and Ti and at least one element selected from the group consisting of Mg, Fe, Co, Ni and Cu, the total of Cr and at least one element selected from the group consisting of Mo and W being 7 atomic % or more, the balance being substantially Al. The amorphous aluminum alloy has excellent characteristics such as ultrahigh corrosion resistance and high corrosion resistance at high temperatures and is self-passivated by the formation of a stable protective film even in a Cl<-> ion-containing solution which is a severe corrosive environment for Al.

IPC 1-7

C22C 45/08

IPC 8 full level

C22C 45/08 (2006.01)

CPC (source: EP)

C22C 45/08 (2013.01)

Citation (search report)

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- [X] PATENT ABSTRACTS OF JAPAN vol. 11, no. 232 (C-437)29 July 1987 & JP-A-62 047 448 (TOYO ALUM K.K.) 2 March 1987
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Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0556808 A1 19930825; **EP 0556808 B1 19960925**; DE 69304947 D1 19961031; DE 69304947 T2 19970327; JP 2911672 B2 19990623; JP H05222496 A 19930831

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EP 93102487 A 19930217; DE 69304947 T 19930217; JP 2936592 A 19920217