Title (en)

METHOD OF QUENCHING AN ALLOY SHEET TO MINIMIZE DISTORTION

Title (de)

VERFAHEN ZUM ABSCHRECKEN EINES LEGIERUNGSBLECHES ZUR MINIMIERUNG VON VERZIEHUNG

Title (fr)

PROCEDE DE TREMPE DE FEUILLE D'ALLIAGE POUR MINIMISER LA DEFORMATION

Publication

EP 1244819 A1 20021002 (EN)

Application

EP 00984732 A 20001215

Priority

- CA 0001522 W 20001215
- US 46730699 A 19991217

Abstract (en)

[origin: WO0144532A1] The invention relates to a method of producing a sheet article or other elongated product of solution heat-treated aluminum alloy substantially free of permanent thermal distortion. The article is subjected to a solution heat treatment at a solutionizing temperature to dissolve precipitates present in the alloy, cooled in a gas from the solutionizing temperature to an upper critical temperature below which precipitation of second phase particles of the alloy may occur, further cooled in a liquid from the upper temperature to a lower critical temperature below which precipitation of the components may no longer occur, and optionally additionally cooled to a temperature below the lower critical temperature. The cooling of the article in the gas is carried out at a rate of cooling at which the yield strength of the article remains high enough to resist permanent deformation caused by thermal stress generated within the article by the cooling.

IPC 1-7

C22F 1/04; C22F 1/047; C21D 9/573

IPC 8 full level

C22F 1/05 (2006.01); **C22F 1/00** (2006.01); **C22F 1/04** (2006.01); **C22F 1/047** (2006.01); C21D 9/573 (2006.01)

IPC 8 main group level

C22F (2006.01)

CPC (source: EP)

C22F 1/04 (2013.01); **C22F 1/047** (2013.01); C21D 9/573 (2013.01)

Citation (search report)

See references of WO 0144532A1

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