

Title (en)

Process to increase the recrystallization temperature of aluminium and its alloys.

Title (de)

Verfahren zur Erhöhung der Rekristallisationstemperatur von Aluminium und Aluminiumlegierungen.

Title (fr)

Procédé permettant d'augmenter la température de recristallisation de l'aluminium et de ses alliages.

Publication

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Application

EP 87420324 A 19871201

Priority

FR 8617015 A 19861202

Abstract (en)

[origin: US4816088A] The invention relates to a method for the deformational transformation of aluminum and its alloys comprising the steps of deforming the aluminum in the solid state and annealing the deformed aluminum at a temperature at which recrystallization occurs. The recrystallization temperature of the aluminum is raised and the grain size is minimized by adding to the aluminum 5 to 1000 ppm uranium prior to the deformation. The method is particularly applicable to the production of aluminum based sheets intended to be subjected to heating at a relatively high temperature, for example the heating which accompanies enamelling or brazing operations, where the heating operation could change the mechanical properties of the sheets.

Abstract (fr)

L'invention est relative à un procédé permettant d'augmenter la température de recristallisation de l'aluminium et de ses alliages, et de minimiser la taille des grains. Elle consiste à ajouter 5 à 1000 ppm d'uranium au moment de l'élaboration du métal. Ce procédé est appliqué notamment à l'obtention de tôles à base d'aluminium destinées à être soumises à un chauffage à température relativement élevée, comme par exemple, celui qui accompagne les opérations d'émaillage ou de brasage et ce, sans que ce traitement puisse altérer les propriétés mécaniques desdites tôles.

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