

Title (en)

ALUMINUM ALLOY PLATE AND PROCESS FOR PRODUCING THE SAME

Title (de)

PLATTE AUS EINER ALUMINIUMLEGIERUNG UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE D'ALLIAGE D'ALUMINIUM ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 2263811 A1 20101222 (EN)

Application

EP 09726074 A 20090326

Priority

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- JP 2008085283 A 20080328

Abstract (en)

An aluminum alloy plate is provided which is suitable for use as members for apparatuses relating to semiconductors. The alloy plate is satisfactory in plate thickness precision and flatness and can be inhibited from having surface defects. Also provided is a process for producing the plate. An aluminum alloy comprising given components is melted (melting step), and hydrogen gas and inclusions are removed therefrom (hydrogen gas removal step and filtration step). This melt is cast into an ingot (casting step). According to need, the ingot is homogenized by a heat treatment (soaking step). This ingot is hot-rolled to a given thickness (hot-rolling step), cut (cutting step), and finished by smoothening the surfaces (smoothening step). According to need, the plate may be subjected to straightening (straightening step) and a heat treatment, e.g., annealing (annealing step). The aluminum alloy plate obtained has a surface flatness of 0.2 mm or less per m of rolling-direction length and has fluctuations in plate thickness within ±0.5% of a desired plate thickness.

IPC 8 full level

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CPC (source: EP)

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C22F 1/04 (2013.01); **C22F 1/047** (2013.01); **C22F 1/05** (2013.01); **B21B 2003/001** (2013.01)

Cited by

FR3101641A1; WO2021064320A1; EP2862952A4; CN102553917A; US10415118B2; US9315885B2; US11361791B2; US2014044588A1;
US9580775B2; US9850556B2; US2018094339A1; US10364485B2; FR3136242A1; WO2023233090A1

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