

Abstract

Title of the Invention: Method for the Production of Water-Reactive Al Film and Constituent Member for Film-Forming Chamber

Provided herein are a method for the production of a water-reactive Al film which comprises the steps of melting a material which comprises 4NAl or 5NAl as an Al raw material and added In in an amount ranging from 2 to 5% by mass on the basis of the mass of the Al raw material in such a manner that the composition of the material becomes uniform; thermally spraying the resulting molten material on the surface of a base material according to the electric arc spraying technique, while using Ar gas as a spraying gas; and solidifying the sprayed molten material through quenching to thus form an Al film in which In is uniformly dispersed in Al crystalline grains; and a constituent member for a film-forming chamber, which is provided, on the surface, with this water-reactive Al film.

Fig. 1