ABSTRACT

SURFACE TREATMENT MATERIAL FOR SEMICONDUCTOR MANUFACTURING SYSTEM AND METHOD FOR PRODUCING SAME

Disclosed are a surface-treatment material of a semiconductor manufacturing system and a method thereof. The surface-treatment material includes a substrate made of aluminum, or aluminum alloy, an anodic oxidation coating formed over the surface of the substrate, with sealing applied thereto, and a fluorine-enriched layer formed over the surface of the anodic oxidation coating, wherein fluorine concentration in the fluorine-enriched layer is not less than 1 mass%.

The method includes an anodic oxidation coating forming step for forming an anodic oxidation coating over the surface of a substrate made of aluminum, or aluminum alloy, a sealing step for applying sealing to the anodic oxidation coating, and a fluorine-enriched layer forming step for forming a fluorine-enriched layer with fluorine enriched to a fluorine concentration not less than 1 mass% over the surface of the anodic oxidation coating with the sealing applied thereto.