



ALUMINUM NITRIDE POWDER HAVING SURFACE LAYER
CONTAINING OXYNITRIDE

ABSTRACT OF THE DISCLOSURE

An aluminum nitride powder having a surface layer containing an oxynitride characterized in that the surface layer of the aluminum nitride particle contains an aluminum oxynitride which has an oxygen content of 5 to 75 mol% in terms of $\text{Al}_2\text{O}_3/(\text{Al}_2\text{O}_3 + \text{AlN})$. The surface layer of the aluminum nitride powder may contain, besides the aluminum oxynitride, at least one other oxynitride selected from among oxynitrides of Mg, Ca, Ba, Ti, V, Cr, Co, Ni, Cu, Ga, Ge, Zr, Nb, Mo, Ru, Hf, Ta, W, Li, B, Si, Y, Sc and rare metal elements and the aluminum oxynitride and at least one other oxynitride have a total oxygen content in the range of 10 to 75 mol% in terms of $(3 \times \text{oxygen amount})/(3 \times \text{oxygen amount} + \text{nitrogen amount})$. The aluminum nitride powder can easily be converted into a sintered body having excellent sinterability and favorable characteristics, since the above surface layer reduces the penetration of oxygen from the surface layer into the crystal grains and prevents the formation of microcracks layer.