ABSTRACT

Bonding Wire for Semiconductor Device Use and Method of Production of Same

Bonding wire for semiconductor device use where both leaning failures and spring failures are suppressed by (1) in a cross-section containing the wire center and parallel to the wire longitudinal direction (wire center cross-section), there are no crystal grains with a ratio a/b of a long axis "a" and a short axis "b" of 10 or more and with an area of 15 μm^2 or more ("fiber texture"), (2) when measuring a crystal direction in the wire longitudinal direction in the wire center cross-section, the ratio of crystal direction <100> with an angle difference with respect to the wire longitudinal direction of 15° or less is, by area ratio, 50% to 90%, and (3) when measuring a crystal direction in the wire longitudinal direction at the wire surface, the ratio of crystal direction <100> with an angle difference with respect to the wire longitudinal direction of 15° or less is, by area ratio, 50% to 90%. During the drawing step, a drawing operation with a rate of reduction of area of 15.5% or more is performed at least once. The final heat treatment temperature and the pre-final heat treatment temperature are made predetermined ranges.