

[Document Name] Abstract of Disclosure

[Title of Invention] Bonding Wire for High Speed Signal

[Object] To provide a bonding wire of an Ag-Pd-Au-based alloy for high speed signal lines, which is free from a rigid silver sulfide (Ag_2S) film though an unstable silver sulfide layer might be formed on a surface of the bonding wire, and is capable of sending ultrahigh frequency signals of a stable band of several GHz or the like.

[Solving Means] A ternary alloy including 2.5 to 4.0 mass% of palladium (Pd) and 1.5 to 2.5 mass% of gold (Au), with the balance being silver (Ag) having purity of 99.99 mass% or more, wherein a cross-section of the bonding wire includes a surface film and a core material, the surface film includes a continuously cast surface of which a diameter is reduced after continuous casting and a surface segregation layer, and the surface segregation layer includes an alloy region where a content of the silver (Ag) is gradually increased and a content of the gold (Au) is gradually reduced as compared to the core material.

[Selected Drawing] Fig. 1