CLAIMS

What is claimed is:

[Claim 1]
Cu alloy wire for ball bonding comprising: 0.5 – 15 wt ppm of P and residual is more than 99.9985 wt % of Cu, and decreasing room temperature hardness of initial balls (FAB) of the Cu alloy wire than that of Cu wire of 99.9999 wt % Cu no added P.

[Claim 2]
High purity Cu alloy wire for ball bonding comprising: 0.5 – 15 wt ppm of P and residual is more than 99.9985 wt % of Cu and total amount of metallic elements except P in Cu is less than the amount of added P, and decreasing room temperature hardness of initial balls (FAB) of the Cu alloy wire than that of Cu wire of 99.9999 wt % Cu no added P.

[Claim 3]
High purity Cu alloy wire for ball bonding in Claim 2 comprising: metallic element(s) except P in Cu are one or more than two among Pt, Au, Ag, Pd, Ca, Fe, Mn, Ni, Al, Pb and Si.

CLAIMS

What is claimed is:

[Claim 1]

Cu alloy wire for ball bonding consist of: 0.5 – 1.5 wt ppm of P and residual is more than 99.9985 wt% of Cu, and decreasing room temperature hardness of initial balls (FAB) of the Cu alloy wire than that of Cu wire of 99.9999 wt% Cu no added P.

[Claim 2]

High purity Cu alloy wire for ball bonding consist of: 0.5 – 1.5 wt ppm of P and residual is more than 99.9985 wt% of Cu and total amount of metallic elements except P in Cu is less than the amount of added P, and decreasing room temperature hardness of initial balls (FAB) of the Cu alloy wire than that of Cu wire of 99.9999 wt % Cu no added P.

[Claim 3]

High purity Cu alloy wire for ball bonding in Claim 2 consist of: metallic element(s) except P in Cu as impurities are one or more than two among Pt, Au, Ag, Pd, Ca, Fe, Mn, Ni, Al, Pb and Si.