

CLAIMS

1. A copper wire for a bonding wire for forming a bonding wire,
wherein the copper wire is formed of high-purity copper having a purity of
5 99.9999 mass% or more,
a wire diameter of the copper wire is 0.5 mm to 3.5 mm, and
an area ratio of a (001) plane in a cross-section of the copper wire perpendicular
to a wire-drawing direction is 15% to 30%.
- 10 2. A method of producing a copper wire for a bonding wire, comprising:
a hot working step of hot-working an ingot formed of high-purity copper having
a purity of 99.9999 mass% or more to produce a wire;
a wire-drawing step of performing cold wire drawing on the produced wire at an
area reduction rate in a range of 80% to 99.6%; and
15 a heat treatment step of performing a heat treatment at a temperature of 200°C to
260°C for 30 minutes to 300 minutes on the wire which is subjected to the wire drawing.
3. The method of producing a copper wire for a bonding wire according to
Claim 2,
20 wherein the hot working is hot extrusion which is performed to an area reduction
rate of 99% to 99.95% at a temperature of 700°C to 900°C.
4. The method of producing a copper wire for a bonding wire according to
Claim 2 or 3,
25 wherein in the heat treatment step, the wire is heated by using a batch type

annealing furnace.

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