

[Document Name] Abstract

[Title of Invention] STRUCTURE OF COATED COPPER WIRE FOR
ULTRASONIC BONDING

[Object] An object of the present invention is to provide a structure of a coated copper wire which enables stable ultrasonic bonding without independently changing each bonding condition even when a type of a coating material or a core material or a wire diameter of the coated copper wire is changed and has a wide process window width in the ultrasonic bonding.

[Configuration] The structure of the present invention is characterized in that: a surface of a core material is provided with a multiple of short streak-like grooves in the form of rings along a longitudinal direction of the wire; and a surface form is such that a coating material comprising a nobler metal or an alloy of the nobler metal having higher oxidization resistance than the core material is coated on the core material.

[Selected Drawing] Fig. 1