WIRE-BONDING APPARATUS AND METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE

ABSTRACT

Provided is a wire-bonding apparatus (10) including: a capillary (28) through which a wire (30) is inserted; a nonsticking determination circuit (36) configured to apply a predetermined electrical signal between a bonding target and the wire (30) in a clamped state and to determine whether or not the wire (30) and the bonding target is sticking as well as whether or not the wire (30) is disconnected based on a response of the application of the predetermined electrical signal; an annular projecting length detection ring (40) disposed coaxially with the capillary (28); and a projecting length determination circuit (38) configured to determine whether or not a projecting length of a wire tail projecting from the tip of the capillary (28) is appropriate based on detection on whether or not power is conductive when a predetermined inspection voltage is applied between the wire (30) and the projecting length detection ring (40) as well as a presence of a discharge spark when a predetermined inspection high voltage is applied between the wire (30) and the projecting length detection ring (40).

FIGURE 1