(2) paying out a length of wire after step (1); and (3) forming a second bend in the wire loop at the predetermined portion after step (2).

[0007] According to another exemplary embodiment aspect of the present invention, a method of forming a wire loop to provide interconnection between a first bonding location and a second bonding location is provided. The method includes the steps of: (1) forming a first bond at the first bonding location with a bonding tool such that a wire engaged with the bonding tool is continuous with the first bond; (2) forming a bend in the wire after step (1); (3) forming a second bond at the second bonding location such that the wire is continuous from the first bond to the second bond; and (4) severing the wire such that a length of wire engaged in the bonding tool is separated from the wire loop formed in steps (1), (2), and (3). Step (2) includes (a) forming a first bend portion of the bend in the wire at a predetermined portion of the wire, the predetermined portion being between and away from each of the first bonding location and the second bonding location, (b) paying out a length of wire after step (a), and (c) forming a second bend portion of the bend in the wire at the predetermined portion after step (b), each of the first bend portion and the second bend portion being part of the bend formed in step (2); (d) paying out another length of wire after step (c), and (e) forming a third bend portion of the bend in the wire at the predetermined portion after step (d).

[0008] The methods of the present invention may also be embodied as an apparatus (e.g., as part of the intelligence of a wire bonding machine), or as computer program instructions on a computer readable carrier (e.g., a computer readable carrier used in connection with a wire bonding machine).

[0009] According to yet another exemplary embodimentaspect of the present invention, a wire loop providing interconnection between a first bonding location and a second bonding location is provided. The wire loop includes a first bond portion bonded to the first bonding location, a second bond portion bonded to the second bonding location, and a length of wire extending between the first bond portion and the second bond portion. The length of wire includes a bend which is between and away from each of the first bond portion and the second bond portion. The bend includes (1) a first bend portion of the bend in the wire loop at a predetermined portion of the wire loop, (2) a first short length of wire, and (3) a second bend portion of the bend in the wire loop at the predetermined portion such that the first short length of wire extends between the first bend portion and the second bend portion, each of the first bend portion and the second bend portion being part of the bend; (4) a second length of wire, and (5) a third bend portion of the bend in the wire loop at the predetermined portion such that the second length of wire extends between the second bend portion of the bend and the third bend portion of the bend.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The invention is best understood from the following detailed description when read in connection with the accompanying drawing. It is emphasized that, according to common practice, the various features of the drawing are not to scale. On the contrary, the dimensions of the various features are arbitrarily expanded or reduced for clarity. Included in the drawing are the following figures: