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(54) **Title**: WIRE PAYOUT MEASUREMENT AND CALIBRATION TECHNIQUES FOR A WIRE BONDING MACHINE

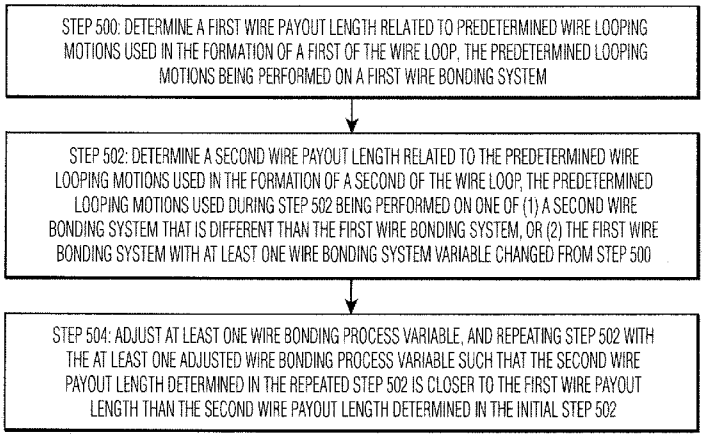


FIG. 5

(57) **Abstract**: A method of calibrating a wire payout related to predetermined looping motions used during formation of a wire loop is provided. The method includes the steps of: (a) determining a first wire payout length related to predetermined wire looping motions used in the formation of a first of the wire loop, the predetermined looping motions being performed on a first wire bonding system; (b) determining a second wire payout length related to the predetermined wire looping motions used in the formation of a second of the wire loop; and (c) adjusting at least one wire bonding process variable, and repeating step (b) with the at least one adjusted wire bonding process variable such that the second wire payout length determined in the repeated step (b) is closer to the first wire payout length than the second wire payout length determined in the initial step (b).

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