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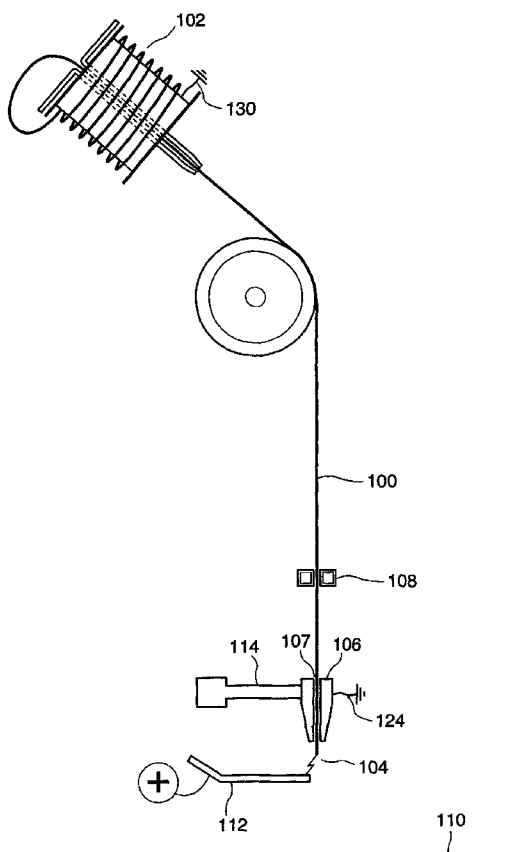
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(54) Title: A WIRE BONDER FOR BALL BONDING INSULATED WIRE AND METHOD OF USING SAME



(57) Abstract: A wire bonder for bonding an insulated wire (100) to a surface (110) is disclosed. The bonder includes a bond head (106, 114), having a bonding position adjacent to said surface (100) and a wire preparation position spaced apart from the surface (110). There is a wire holder (106) on the bond head (106, 114), the wire holder (106) being sized and shaped to permit a free end of the insulated wire (100) to extend from the wire holder (106) when the bond head (106, 114) is in the spaced apart position. A source (102) of insulated wire (100) for said bond head (106, 114) is provided as well as an electrical discharge wand (112) positioned adjacent to said bond head (106, 114) when the bond head (106, 114) is in the spaced apart position. The wand (112) directs sufficient electricity at the extending free end (104) of the insulated wire (100) to form a bond ball on the free end. A ground (124) associated with the insulated wire (100), is provided the ground (124) being sized and positioned to conduct electrical energy away from the insulated bond wire (100) to prevent the insulation on the bond wire remote from the free end (104) from being damaged.

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