

FINE PITCH BONDING TECHNIQUE

ABSTRACT OF THE DISCLOSURE

A capillary for bonding a wire between two bonding locations which comprises a capillary (1) having a body having an exterior surface, a bore (23) therethrough and a wall disposed between and defined by the bore and the exterior surface, the bore terminating at an end portion (9) of said body. The wall has at one end portion thereof first (21) and second opposing sectors spaced from each other by third and fourth opposing sectors (31), the first sector having a thickness greater than the rest of the sectors and the second sector having a thickness intermediate the first sector and the third and fourth sectors. A first bond, generally a ball bond (3), is formed at a first bonding location with the capillary. The capillary is moved to a second bonding location and a stitch bond is formed at the second location while the portion of the capillary of greater thickness is downstream of the path of travel of the capillary while making the stitch bond.

Figure 4(a)