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(71) Applicant *(for all designated States except US)*: **MICRON TECHNOLOGY, INC.** [US/US]; 8000 SOUTH FEDERAL WAY, PO Box 6, Boise, Idaho 83707-0006 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **HEMBREE, David R.** [US/US]; 11074 W. Edgehill Drive, Boise, Idaho 83709 (US).

(74) Agent: **GRATTON, Stephen A.**; 2764 South Braun Way, Lakewood, Colorado 80228 (US).

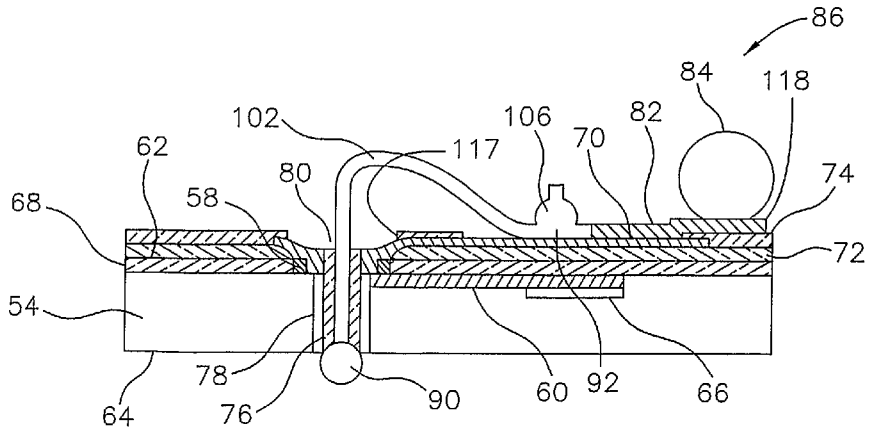
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(54) **Title:** METHOD AND SYSTEM FOR FABRICATING SEMICONDUCTOR COMPONENTS WITH THROUGH WIRE INTERCONNECTS



(57) **Abstract:** A method for fabricating a semiconductor component (86) with a through wire interconnect (102) includes the step of providing a substrate (54) having a circuit side (62), a back side (64), and a through via (76). The method also includes the steps of: threading a wire (14) through the via (76), forming a contact (90) on the wire (14) on the back side (64), forming a bonded contact (92) on the wire (14) on the circuit side (62), and then severing the wire (14) from the bonded contact (92). The through wire interconnect includes (102) the wire (14) in the via (76), the contact (90) on the back side (64) and the bonded contact (92) on the circuit side (62). The contact (90) on the back side (64), and the bonded contact (92) on the circuit side (62), permit multiple components (86-1, 86-2, 86-3) to be stacked with electrical connections (170) between adjacent components. A system (120) for performing the method includes the substrate (54) with the via (76), and a wire bonder (10) having a bonding capillary (12) configured to thread the wire (14) through the via (76), and form the contact (90) and the bonded contact (92). The semiconductor component (86) can be used to form chip scale components, wafer scale components, stacked components (146), or interconnect components (861) for electrically engaging or testing other semiconductor components (156).

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