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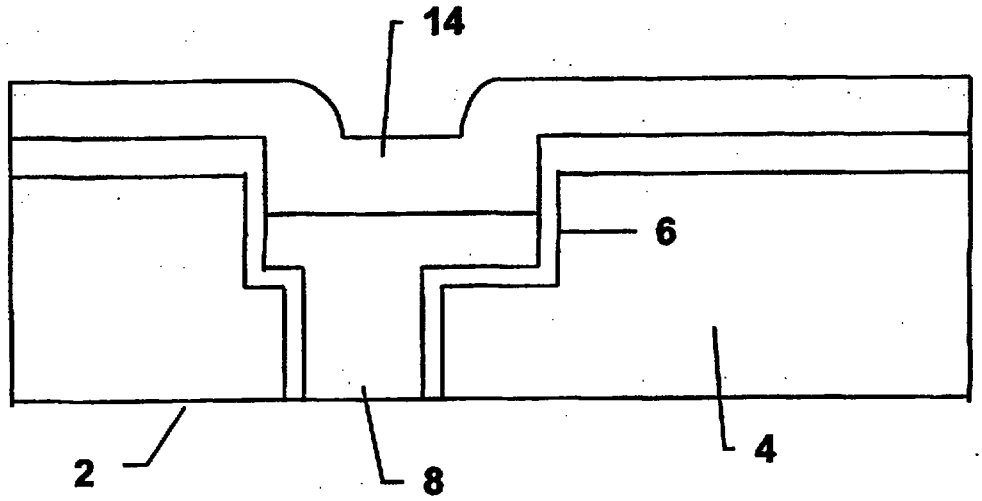
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(54) Title: FABRICATION METHOD FOR SELF ALIGNED CU DIFFUSION BARRIER IN AN INTEGRATED CIRCUIT



(57) Abstract: A microelectronic device having a self aligned metal diffusion barrier is disclosed. A microelectronic device having a substrate (2) and a dielectric layer (4) on the substrate. A trench having inside walls is formed through the dielectric layer (4). A lining of a barrier metal (6) is on the inside walls of the trench and a fill metal (8) is in the trench between the linings on the inside walls of the trench. The fill metal (8) and the barrier metal (6) have substantially different removal selectivities. A covering (14) of the barrier metal is on the fill metal and the covering spans the linings on the inside walls of the trench and conforms to the top of the fill metal in the trench.

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