METHODS OF FABRICATING INTERCONNECTS FOR SEMICONDUCTOR COMPONENTS

ABSTRACT

In one aspect, the invention encompasses a method of fabricating an interconnect for a semiconductor component. A semiconductor substrate is provided, and an opening (212) is formed which extends entirely through the substrate. A first material (220) is deposited along sidewalls (218) of the opening at a temperature of less than or equal to about 200°C. The deposition can comprise one or both of atomic layer deposition and chemical vapor deposition, and the first material can comprise a metal nitride. A solder-wetting material (224) is formed over a surface of the first material. The solder-wetting material can comprise, for example, nickel. Subsequently, solder (240) is provided within the opening and over the solderwetting material.

FIGURE 13