Interconnects With Ti-Containing Liners

ABSTRACT

An electrical conductor for use in an electronic structure (10) that includes a conductor body that is formed of an alloy including atomic between about 0.001% and 2% of an element selected from the group consisting of: Ti, Zr, In, Sn, and Hf. A liner (24) abutting the conductor body is formed of an alloy that includes Ta, W, Ti, Nb, and V. A liner (40, 42) for use in a semiconductor interconnect having formed of a liner conductor material (44, 46) selected from the group consisting of: Ti, Hf, In, Sn, Zr and alloys thereof, $TiCu_3$, $Ta_{1-x}Ti_x$, $Ta_{1-x}Hf_x$, $Ta_{1-x}In_{xy}$, $Ta_{1-x}Sn_x$ and $Ta_{1-x}Zr_x$.

FIG. 1A.