

ABSTRACT

METHODS FOR DIRECTLY BONDING TOGETHER SEMICONDUCTOR STRUCTURES, AND BONDED SEMICONDUCTOR STRUCTURES FORMED USING SUCH METHODS

Embodiments of the present invention include methods of directly bonding together semiconductor structures. In some embodiments, a cap layer may be provided at an interface between directly bonded metal features of the semiconductor structures. In some embodiments, impurities are provided within the directly bonded metal features of the semiconductor structures. Bonded semiconductor structures are formed using such methods.

No figure