

ASSEMBLY OF WAFER STACKS

ABSTRACT OF THE DISCLOSURE

A method of forming a wafer stack includes providing a sub-stack comprising a first wafer and a second wafer. The sub-stack includes a first thermally-curable adhesive at an interface between the upper surface of the first wafer and the lower surface of the second wafer. A third wafer is placed on the upper surface of the second wafer. A second thermally-curable adhesive is present at an interface between the upper surface of the second wafer and the lower surface of the third wafer. Ultra-violet (UV) radiation is provided in a direction of the upper surface of the third wafer to cure a UV-curable adhesive in openings in the second wafer and in contact with portions of the third wafer so as to bond the third wafer to the sub-stack at discrete locations. Subsequently, the third wafer and the sub-stack are heated so to cure the first and second thermally-curable adhesives.

Figure 11