

ABSTRACT

METHOD OF FABRICATING MICROELECTROMECHANICAL SYSTEM

STRUCTURES

A method of simultaneously bonding components, comprising the following steps. At least first, second and third components are provided and comprise: at least one glass component; and at least one conductive or semiconductive material component. The order of stacking of the components is determined to establish interfaces between the adjacent components. A hydrogen-free amorphous film is applied to one of the component surfaces at each interface comprising an adjacent: glass component; and conductive or semiconductive component. A sol gel with or without alkaline ions film is applied to one of the component surfaces at each interface comprising an adjacent: conductive or semiconductive component; and conductive or semiconductive component. The components are simultaneously anodically bonded in the determined order of stacking.

Fig. 1