

METHOD FOR MANUFACTURING A HYBRID STRUCTURE

ABSTRACT

The invention relates to a method for manufacturing a hybrid structure (60) comprising an effective layer (20) of piezoelectric material that has an effective thickness and is arranged on a supporting substrate (1) having a substrate thickness and a thermal expansion coefficient lower than that of the effective layer (20), the method comprising: a) A step of providing a bonded structure comprising a piezoelectric material donor substrate and the supporting substrate (1), the bonded structure having a bonding interface (5) between these two substrates, b) A first step of thinning the donor substrate to form a thinned layer that has an intermediate thickness and is arranged on the supporting substrate (1), the assembly forming a thinned structure, c) A step of heat treating the thinned structure at an annealing temperature, d) A second step, after step c), of thinning the thinned layer to form the effective layer (20). The method is characterized in that it comprises, prior to step b), a step a') of determining a range of intermediate thicknesses that prevent the thinned structure (6') from being damaged during step c), the range being defined by a threshold thickness and a maximum thickness, and the intermediate thickness of the thinned layer being selected from within this range.

[FIG. 3]