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(54) FABRICATION OF CLOSE-SPACED MEMS DEVICES BY METHOD OF PRECISE ADHESION REGULATION

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(57) ABSTRACT

In one aspect, the present invention provides a method for fabricating two layers separated by a gap comprising the steps of: (a) providing a first material; (b) treating the first material to reduce the number of available bonding centers; (c) placing a second material over the first material and allowing bonds to form between the two materials to form a composite; and (d) separating the composite so formed along the boundary of the two materials. In a further aspect, subsequent layers of material may be introduced to the composite by repeating steps (b) and (c) under conditions where adhesion between the subsequent layers is greater, smaller or substantially the same as the adhesion between the first and second material.

13 Claims, 4 Drawing Sheets

