

ABSTRACT

Manufacturing a flexible structure by transfers of layers

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A method for manufacturing a flexible structure (13) comprising the following steps:

- implanting ionic species in first and second source substrates (1, 2) so as to form first and second embrittlement regions (3.5, 4.6) respectively,
- 10 delimiting first and second thin films (3, 4).
- providing a flexible substrate (9), the stiffness R of which is less than or equal to $10^7 \text{GPa} \cdot \mu\text{m}^3$,
- securing the first and second thin films (3, 4) to the first and second faces of the flexible substrate (9) respectively so as to form a stack (12)
- 15 including the flexible structure (13) delimited by the first and second embrittlement regions (3.5, 4.6), the flexible structure (13) having a stiffening effect suitable for allowing transfers of the first and second thin films (3, 4), and
- applying a thermal budget so as to transfer the first and second thin films (3, 4) onto the flexible substrate (9).

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Fig. 1E