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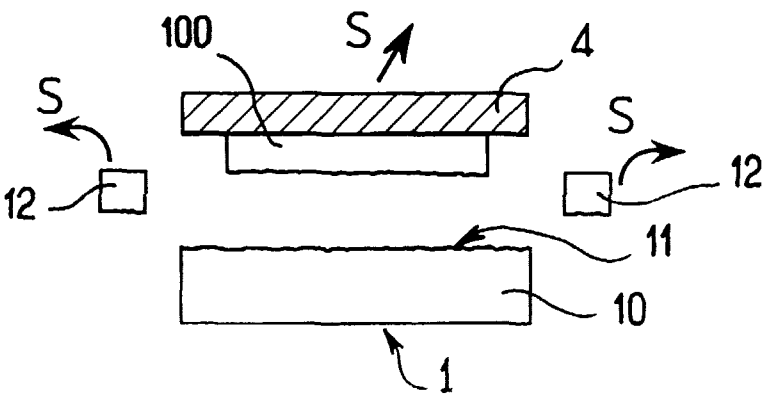
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(54) Title: OPTIMIZED METHOD OF TRANSFER OF A THIN LAYER OF SILICON CARBIDE TO A RECEIVING SUBSTRATE



(57) Abstract: The invention relates to an optimized method of transfer of a thin layer (100) of monocrystalline silicon carbide, derived from a source substrate (1), to a receiving substrate (4), comprising the steps consisting of: - bombarding the front face of the said source substrate (1) with a majority of H^+ ions to form an embrittlement zone (5), - detaching the said thin layer (100) from the remainder (10) of the said source substrate (1) along the said embrittlement zone (5),characterized in that the implantation of H^+ ions is performed according to the following inequality, in which the implantation dose D is expressed in number of H^+ ions/cm^2 and the implantation energy E, expressed in keV, is greater than or equal to 95 keV: $[(E\text{Œ}1.10^{14} + 5.10^{16})/1.1] \leq D \leq [(E\text{Œ}1.10^{14} + 5.10^{16})/0.9]$ and in that after the step of bonding, a thermal budget is applied sufficient to exfoliate completely or almost completely the zone (12) of the said thin layer (100) of the source substrate (1) which has not been transferred to the said receiving substrate (4).

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