(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
31 July 2003 (31.07.2003)

PCT

(10) International Publication Number
WO 2003/063213 A3

(51) International Patent Classification[7]: H01L 21/18, 21/265, 21/762, 21/20, 21/76

(21) International Application Number: PCT/EP2003/000692

(22) International Filing Date: 21 January 2003 (21.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0200813 23 January 2002 (23.01.2002) FR

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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

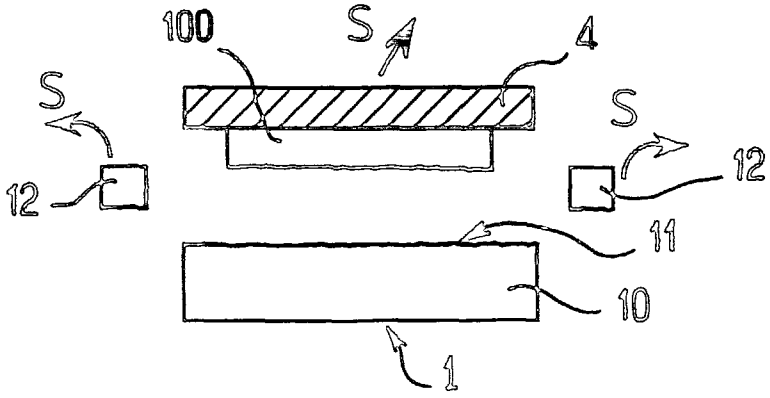
Declaration under Rule 4.17:
— *of inventorship (Rule 4.17(iv)) for US only*

Published:
— *with international search report*

(88) Date of publication of the international search report: 15 January 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(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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