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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031842 A2

(51) International Patent Classification[7]: H01L 21/322

(21) International Application Number:
PCT/BE2004/000137

(22) International Filing Date:
27 September 2004 (27.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0311347 26 September 2003 (26.09.2003) FR

(71) Applicant *(for all designated States except US)*: **UNIVERSITE CATHOLIQUE DE LOUVAIN** [BE/BE]; Place de l'Université 1, B-1348 Louvain-La-Neuve (BE).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **LEDERER, Dimitri** [BE/BE]; Rue Camille Cals 28, B-5030 Ernage (BE). **RASKIN, Jean-Pierre** [BE/BE]; Rue de la Brasserie 17, B-5310 Saint-Germain (BE).

(74) Agents: **BIRD, William, E.** et al.; Bird Goën & Co., Klein Dalenstraat 42, B-3020 Winksele (BE).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

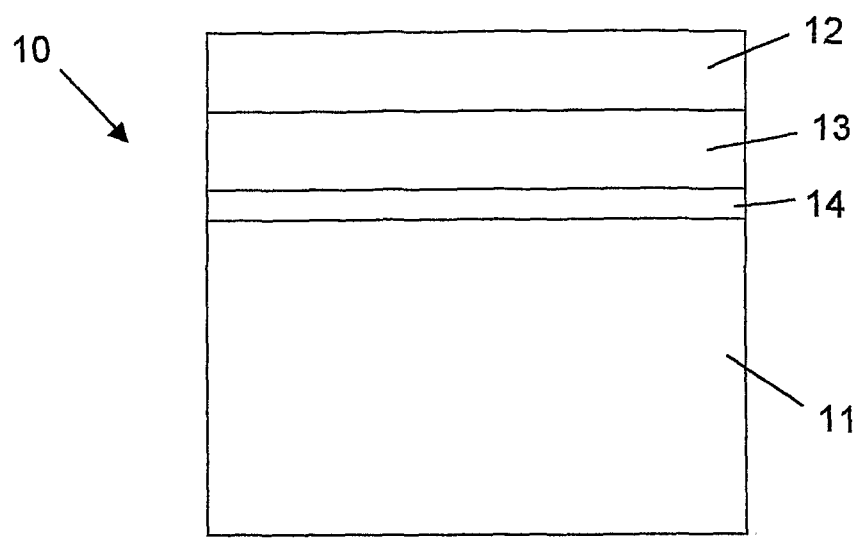
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (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:
— *without international search report and to be republished upon receipt of that report*

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: METHOD OF MANUFACTURING A MULTILAYER SEMICONDUCTOR STRUCTURE WITH REDUCED OHMIC LOSSES



(57) Abstract: The present invention provides a method of manufacturing a multilayer semiconductor structure featuring reduced ohmic losses with respect to standard multilayer semiconductor structures. The semiconductor structure comprises a high resistivity silicon substrate with resistivity higher than 3 KΩ.cm, an active semiconductor layer and an insulating layer in between the silicon substrate and the active semiconductor layer. The method comprises suppressing ohmic losses inside the high resistivity silicon substrate by increasing, with regard to prior art devices, charge trap density between the insulating layer and the silicon substrate. In particular this may be obtained by applying an intermediate layer in between the silicon substrate and the insulating layer, the intermediate layer comprising grains having a size, wherein the mean size of the grains of the intermediate layer is smaller than 150 nm, preferably smaller than 50 nm.

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