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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 May 2010 (20.05.2010)

PCT

(10) International Publication Number
WO 2010/056443 A1

(51) International Patent Classification:
H01L 21/02 (2006.01)

(21) International Application Number:
PCT/US2009/059939

(22) International Filing Date:
8 October 2009 (08.10.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/109,784 30 October 2008 (30.10.2008) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

WO 2010/056443 A1

(54) Title: METHODS OF FORMING LAYERS OF SEMICONDUCTOR MATERIAL HAVING REDUCED LATTICE STRAIN, SEMICONDUCTOR STRUCTURES, DEVICES AND ENGINEERED SUBSTRATES INCLUDING SAME

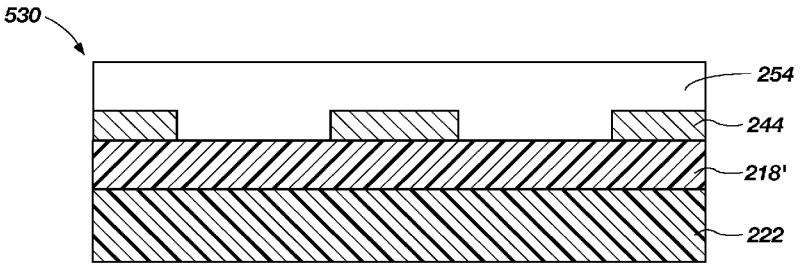


FIG. 5D

(57) Abstract: Methods of fabricating semiconductor devices or structures include forming structures of a semiconductor material overlying a layer of a compliant material, subsequently changing the viscosity of the compliant material to relax the semiconductor material structures, and utilizing the relaxed semiconductor material structures as a seed layer in forming a continuous layer of relaxed semiconductor material. In some embodiments, the layer of semiconductor material may comprise a III-V type semiconductor material, such as, for example, indium gallium nitride. Novel intermediate structures are formed during such methods. Engineered substrates include a continuous layer of semiconductor material having a relaxed lattice structure.