



- (51) **International Patent Classification:**
H01L 29/78 (2006.01) *H01L 21/336* (2006.01)
- (21) **International Application Number:**
PCT/US2011/066271
- (22) **International Filing Date:**
20 December 2011 (20.12.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
12/982,083 30 December 2010 (30.12.2010) US
- (71) **Applicant (for all designated States except US):** **INTEL CORPORATION** [US/US]; 2200 Mission College Boulevard, MS: RNB-4-150, Santa Clara, California 95052 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **MUKHERJEE, Niloy** [IN/US]; 7732 SW Carrollon Drive, Beaverton, Oregon 97007 (US). **DEWEY, Gilbert** [US/US]; 920 Se 58th Ave, Hillsboro, Oregon 97123 (US). **RADOSAVLJEVIC, Marko** [US/US]; 4129 NW Chaparral Terr, Beaverton, Oregon 97006 (US). **CHAU, Robert S.** [US/US]; 8875 Sw 171st Avenue, Beaverton, Oregon 97007 (US). **METZ,**

Matthew V. [US/US]; 18860 Nw Aurora Pl., Portland, Oregon 97229 (US).

(74) **Agents:** **VINCENT, Lester J.** et al.; Blakely Sokoloff Taylor & Zafman, 1279 Oaknead Parkway, Sunnyvale, California 94085 (US).

(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, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK,

[Continued on next page]

(54) **Title:** A METHOD TO REDUCE CONTACT RESISTANCE OF N-CHANNEL TRANSISTORS BY USING A III-V SEMI-CONDUCTOR INTERLAYER IN SOURCE AND DRAIN

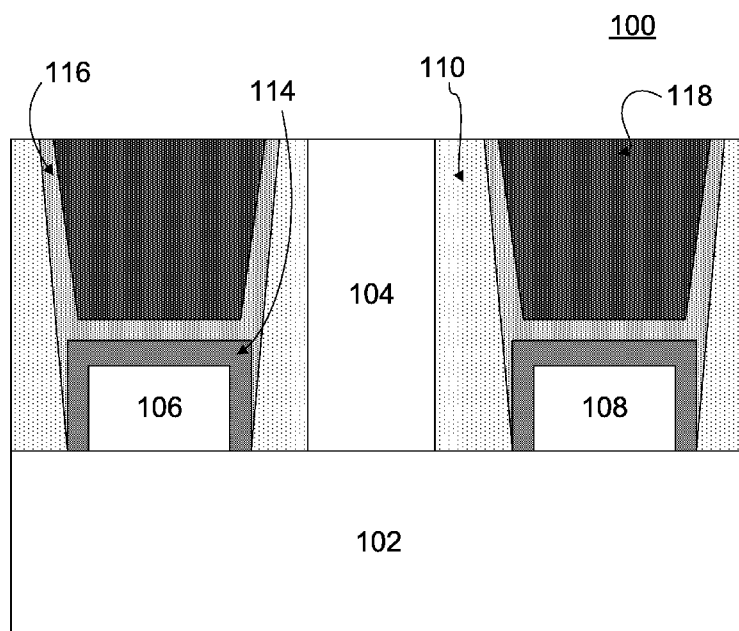


Figure 1

(57) **Abstract:** A method to reduce contact resistance of n-channel transistors by using a III-V semiconductor interlayer in source and drain is generally presented. In this regard, a device is introduced comprising an n-type transistor with a source region and a drain region a first interlayer dielectric layer adjacent the transistor, a trench through the first interlayer dielectric layer to the source region, and a conductive source contact in the trench, the source contact being separated from the source region by a III-V semiconductor interlayer. Other embodiments are also disclosed and claimed.





SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG). **Published:**

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