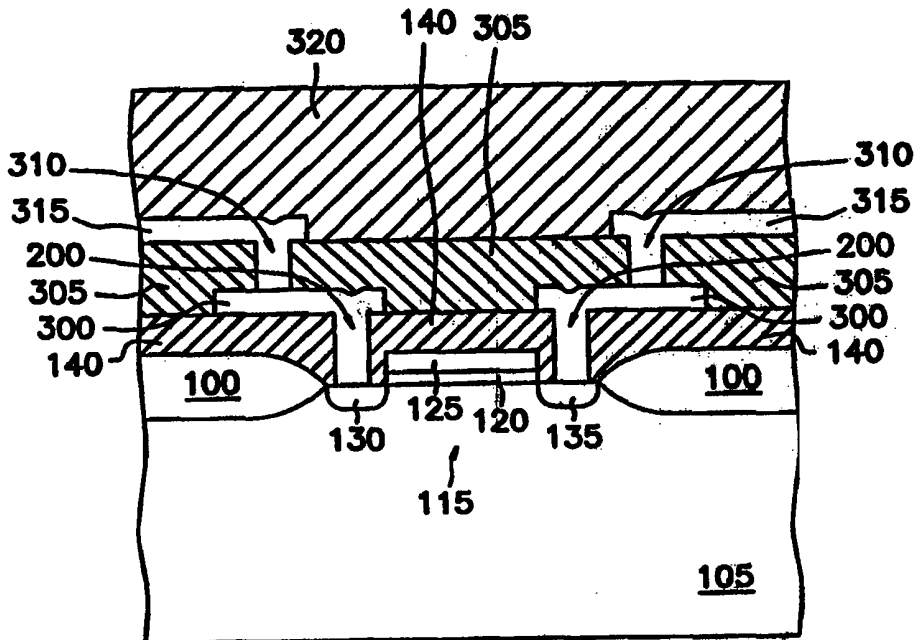




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<p>(21) International Application Number: PCT/US98/21588 (22) International Filing Date: 14 October 1998 (14.10.98) (30) Priority Data: 08/950,319 14 October 1997 (14.10.97) US (71) Applicant: MICRON TECHNOLOGY, INC. [US/US]; 8000 South Federal Way, Boise, ID 83716-9632 (US). (72) Inventors: AHN, Kie, Y.; 639 Quaker Street, Chappaqua, NY 10514 (US). FORBES, Leonard; 965 N.W. Highland Terrace, Corvallis, OR 97330 (US). (74) Agent: VIKSNINS, Ann, S.; Schwegman, Lundberg, Woessner & Kluth, P.O. Box 2938, Minneapolis, MN 55402 (US).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p>	

(54) Title: POROUS SILICON OXYCARBIDE INTEGRATED CIRCUIT INSULATOR



(57) Abstract

An integrated circuit includes at least one porous silicon oxycarbide (SiOC) insulator (140, 305), which provides low dielectric constant (e.g., $\epsilon_R < 2$) for minimizing parasitic capacitance. The insulator provides IC isolation, such as between circuit elements (115), between interconnection lines (300, 315), between circuit elements (115) and interconnection lines (300, 315), or as a passivation layer (320) overlying both circuit elements and interconnection lines.