

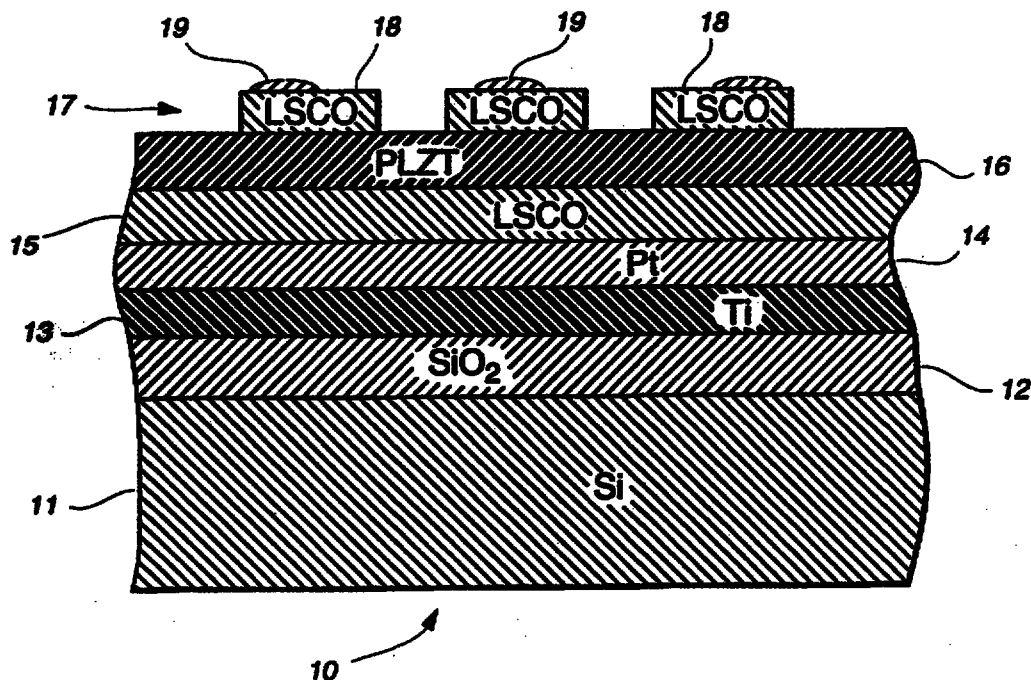


SG 9701733-9

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H01L 29/76, 31/062	A1	(11) International Publication Number: WO 96/16447 (43) International Publication Date: 30 May 1996 (30.05.96)
(21) International Application Number: PCT/US95/14740 (22) International Filing Date: 3 November 1995 (03.11.95) (30) Priority Data: 08/341,728 / 18 November 1994 (18.11.94) US (71) Applicant: BELL COMMUNICATIONS RESEARCH, INC. [US/US]; 445 South Street, Morristown, NJ 07960-6438 (US). (72) Inventor: RAMESH, Ramamoorthy; 13512 Green Castle Ridge Terrace, Burtonsville, MD 20866 (US). (74) Agents: WHITE, Lionel, N. et al.; International Coordinator, Rm. 1G112R, 445 South Street, Morristown, NJ 07960-6438 (US).	(81) Designated States: AU, BR, CA, CN, JP, KR, MX, NZ, SG, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>RTMP's copy</i>	

(54) Title: POLYCRYSTALLINE FERROELECTRIC CAPACITOR HETEROSTRUCTURE EMPLOYING HYBRID ELECTRODES



(57) Abstract

Ferroelectric capacitor heterostructures exhibiting exceptional reliability and resistance to fatigue and imprinting comprise hybrid electrodes of highly conductive platinum (14) with polycrystalline metallic oxide (15) and ferroelectric materials (16) deposited on Si-CMOS-compatible substrates (11) without the requirement for interposed crystallographic orientation templates.