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(21) International Application Number: PCT/NO99/00022 (22) International Filing Date: 28 January 1999 (28.01.99) (30) Priority Data: 19980385 28 January 1998 (28.01.98) NO 19982518 2 June 1998 (02.06.98) NO (71) Applicant (for all designated States except US): OPTICOM ASA [NO/NO]; Brynsveien 3B, N-0667 Oslo (NO). (72) Inventors; and (75) Inventors/Applicants (for US only): ① NORDAL, Per-Erik [NO/NO]; Båstadryggen 19, N-1370 Asker (NO). LEISTAD, Geirr, I. [NO/NO]; Jongsstubben 19, N-1300 Sandvika (NO). ③ GUDESEN, Hans, Gude [NO/NO]; Tyrihansveien 5, N-1639 Gamle Fredrikstad (NO).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, 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, US, 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). Published With international search report. ② Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments Under Rule 91.1(f), with a request for rectification. In English translation (filed in Norwegian).
(54) Title: A METHOD FOR GENERATING ELECTRICAL CONDUCTING OR SEMICONDUCTING STRUCTURES IN TWO OR THREE DIMENSIONS, A METHOD FOR ERASING THE SAME STRUCTURES AND AN ELECTRIC FIELD GENERATOR/MODULATOR FOR USE WITH THE METHOD FOR GENERATING		
(57) Abstract In a method for generating electrical conducting or semiconducting structures in three dimensions in a matrix which comprises two or more materials in spatially separated material structures, an electric field is applied to the separate material structure or the field-modulated spatially according to a protocol which represents a predetermined pattern of electrical conducting or semiconducting structures which are generated in the material structure in response to the field. The matrix composed by the material structures will hence comprise structures of this kind in three dimensions. In a method for global erasing an electric field is applied to the matrix until the materials in the matrix in response to the field in their entirety arrive in a non-conducting state. In an electric field generator/modulator (EFGM) which can be used for patterning and generating electrical conducting or semiconducting structures, two electrode means (E1;E2) comprise parallel strip electrodes (21;22) provided mutually spaced apart in parallel planes such that the electrodes (21, 22) form a matrix-like arrangement. The electrode means (E1;E2) are over cross-connection devices (24, 25) connected with a power supply (23). EFGM (20) is adapted for receiving a thin-film material between the electrode devices (E1, E2) in order to generate said structures.  		