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(21) International Application Number: PCT/NO98/00185 (22) International Filing Date: 17 June 1998 (17.06.98) (30) Priority Data: 972803 17 June 1997 (17.06.97) 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): GUDESEN, Hans, Gude [NO/NO]; Tyrihansveien 5, N-1639 Gamle Fredrikstad (NO). LEISTAD, Geirr, I. [NO/NO]; Jongsstubben 19, N-1300 Sandvika (NO). NORDAL, Per-Erik [NO/NO]; Båstadryggen 19, N-1370 Asker (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, 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, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>In English translation (filed in Norwegian).</i> (88) Date of publication of the international search report: 1 April 1999 (01.04.99)	

(54) Title: ELECTRICALLY ADDRESSABLE PASSIVE DEVICE, METHOD FOR ELECTRICAL ADDRESSING OF THE SAME AND USES OF THE DEVICE AND THE METHOD

(57) Abstract

An electrically addressable passive device for registration, storage and/or processing of data comprises a functional medium (1) in the form of a continuous or patterned structure (S) which may undergo a physical or chemical change of state. The functional medium (1) comprises individually addressable cells (2) which represent a registered or detected value or are assigned a predetermined logical value for the cell. The cell (2) is provided between the anode (3) and cathode (4) in an electrode means (E) which contacts the function medium in the cell and causes an electrical coupling therethrough, the functional medium having a non-linear impedance characteristic, whereby the cell (2) directly can be supplied with energy which effects a change in the state of the cell. In a method for electrical addressing of the passive device wherein the addressing comprises operations for i.a. detection and registration as well as further operations for writing, reading and switching of a logical value assigned to the cell, electric energy is applied directly to the functional medium of the cell in order to change its state and hence effect an addressing operation. Use in optical detector means, volumetric data storage devices or data processing devices.