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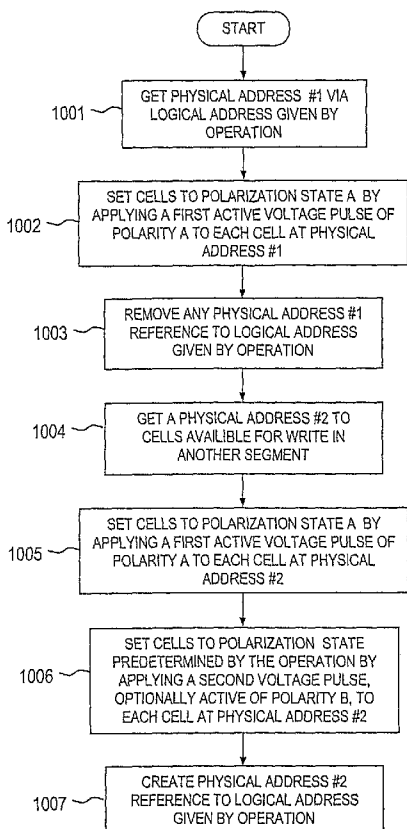
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- (71) Applicant (for all designated States except US): **THIN FILM ELECTRONICS ASA** [NO/NO]; P.O. Box 1872 Vik, N-0124 Oslo (NO).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **HAMBERG, Per** [SE/SE]; Framnäs, S-590 40 Kisa (SE). **KARLSSON, Christer** [SE/SE]; Långgatan 81, S-589 55 Linköping (SE). **NORDAL, Per-Erik** [NO/NO]; Båstadryggen 19, N-1387 Asker (NO). **OJAKANGAS, Nicklas** [SE/SE]; Norgegatan 12, S-582 31 Linköping (SE). **CARLSSON, Johan** [SE/SE]; Ekholmsvägen 219, S-589 29 Linköping (SE). **GUDESEN, Hans, Gude** [NO/BE]; 17 Rue Fulton, B-1000 Brussels (BE).
- (74) Common Representative: **LEISTAD, Geirr, I.**; Thin Film Electronics ASA, P.O. Box 1872 Vik, N-0124 Oslo (NO).
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(54) Title: METHOD FOR OPERATING A DATA STORAGE APPARATUS EMPLOYING PASSIVE MATRIX ADDRESSING



(57) Abstract: In a method for reducing detrimental phenomena related to disturb voltages in a data storage apparatus employing passive matrix addressing, particularly a memory device or a sensor device, an application of electric potentials conforming to an addressing operation is generally controlled in a time-coordinated manner according to a voltage pulse protocol. In an addressing operation a data storage cell is set to a first polarization state by means of a first active voltage pulse and then, dependent on the voltage pulse protocol, a second voltage pulse which may be a second active voltage pulse of opposite polarity to that of the first voltage pulse, is applied and used for switching the data storage cell to a second polarization state. The addressed cell is thus set to a predetermined polarization state as specified by the addressing operation. The data storage cells of the apparatus are provided in two or more electrically separated segments such that each segment comprises a separate physical address space for the apparatus. In an addressing operation the data are directed to a segment that is selected based on information on prior and/or scheduled applications of active voltage pulses to the segments.

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