

Title (en)

FERROELECTRIC THIN FILMS OF REDUCED TETRAGONALITY

Title (de)

FERROELEKTRISCHE DÜNNSCHICHTEN MIT REDUZIERTER TETRAPONALITÄT

Title (fr)

FILMS FERROELECTRIQUES MINCES A TETRAGONALITE REDUITE

Publication

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Application

EP 99948440 A 19990924

Priority

- US 9922178 W 19990924
- US 16077898 A 19980924

Abstract (en)

[origin: WO0017936A1] A ferroelectric material, especially as incorporated into a crystallographically oriented epitaxial ferroelectric cell, of $\text{Pb}_{1-x}\text{La}_x\text{Zr}_y\text{Ti}_{1-y}\text{O}_3$ or $\text{Pb}_{1-x}\text{Nb}_x\text{Zr}_y\text{Ti}_{1-y}\text{O}_3$ having a moderately high La or Nb content such that the unit cell is less tetragonal, that is, more nearly cubic, so as to reduce stress effects. A most preferred value of the c/a constant is about 1.01. Exemplary compositional ranges for x are 6 to 20 % for La and 3 to 15 % for Nb, when y is 20 %. The reduced polarizabilities voltages are consistent with integrated ferroelectric memories operating at 3.0V and lower.

IPC 1-7

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IPC 8 full level

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See references of WO 0017936A1

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