

Title (en)
PIEZOELECTRIC COMPONENT HAVING A MAGNETIC LAYER

Title (de)
PIEZOELEKTRISCHES BAUELEMENT MIT MAGNETISCHER SCHICHT

Title (fr)
COMPOSANT PIEZO-ELECTRIQUE A COUCHE MAGNETIQUE

Publication
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Application
EP 06778276 A 20060817

Priority

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Abstract (en)
[origin: WO2007023131A2] The invention relates to ceramics and to a piezoelectric component having a magnetic layer, which can be used, for example, as a resistor component, as a switch element or control or memory elements or as a sensor. The aim of the invention is to provide a piezoelectric component having a magnetic layer which can modify the electric and magnetic properties of the thin layer(s), which are arranged thereon, by means of mechanical extension. Said aim is achieved by virtue of the fact that said piezoelectric component having a magnetic layer, which comprises the piezoelectric compound $(1-x)\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ -(X) PbTiO_3 wherein $x = 0,2 - 0,5$ or the piezoelectric compound $(1-y)\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$ -(y) PbTiO_3 wherein $y = 0 - 0,2$ as a substrate, with at least one thin magnetic layer arranged thereon, is epitaxially grown.

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