Title (en)

THIN FILM FOR A PRECISION RESISTOR

Publication

EP 0370478 A3 19910508 (DE)

Application

EP 89121543 A 19891121

Priority

DD 32203888 A 19881122

Abstract (en)

[origin: EP0370478A2] The invention relates to the field of electronics/microelectronics and concerns thin films for precision resistors such as are used, for example, in hybrid circuits, sensors or integrated circuits. The object of the invention of changing the composition of the films and their structure with respect to the heterogeneity, is achieved, according to the invention, by CrSiO-based thin films for precision resistors with 10 to 50 mole per cent of oxygen and an Si:Cr atomic ratio of between 1 and 10 and with one or more high-melting metals (x) of 0 to 10 mole per cent and 0 to 50 mole per cent of Al based on the total CrSiXAl system, in that the film contains between 2 and 20 mole per cent of hydrogen based on the total CrSiCAlOH system, that some of the hydrogen is bonded in the form of OH groups and that the film exhibits a segregation into O-rich and O-poor clusters which is associated with a column structure. The invention makes it possible to specify resistor thin films having precision characteristics.

IPC 1-7

H01C 7/00

IPC 8 full level

H01C 7/00 (2006.01)

CPC (source: EP)

H01C 7/006 (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT DE FR SE

DOCDB simple family (publication)

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