Title (en)

S-PARAMETER MICROSCOPY FOR SEMICONDUCTOR DEVICES

Title (de)

S-PARAMETER-MIKROSKOPIE FÜR HALBLEITERBAUELEMENTE

Title (fr)

MICROSCOPIE A PARAMETRES S POUR DES DISPOSITIFS A SEMI-CONDUCTEURS

Publication

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Application

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Priority

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Abstract (en)

[origin: WO0184464A1] A method of using bias-dependent S-parameter measurements as a form of microscopy (figure 5). The microscopy can be used to resolve the details of the internal charge and electric field structure of a semiconductor device. Like other forms of microscopy, the S-parameter microscopy focuses on pseudo "images" and provides a contrast in the "images". Essentially, the images are gathered in raw form as S-parameter measurements and extracted as small signal models. The models are used to form charge control maps (32), through a selective method analogous to focusing. Focusing is provided for by an algorithm for the unique determination of small signal parameters with contrasts provided by utilizing measured bias dependent activity to discriminate boundaries between the electrical charge and fields.

IPC 1-7

G06G 7/48

IPC 8 full level

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Citation (search report)

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