

Title (en)

Semiconductor device for adjusting threshold value shift due to short channel effect

Title (de)

Halbleiterbaustein zum Einstellen einer durch Kurzkanaleffekte verursachten Schwellspannungsverschiebung

Title (fr)

Composant semi-conducteur pour régler le déplacement de la tension de seuil provoqué par l'effet de canal court

Publication

EP 1396777 A1 20040310 (EN)

Application

EP 02028136 A 20021218

Priority

DE 10240177 A 20020830

Abstract (en)

The present invention generally relates to a semiconductor device and more specific to a semiconductor device for detecting and adjusting leakage current dependent on threshold voltage of an integrated semiconductor device implemented in sub-micron technology, i.e. transistors, and a method related thereto. To adjust the threshold voltage variation due to uncertainties in the channel length induced by the fabrication process (short channel effect) in the semiconductor a comparison between small and long channel devices is proposed. According to the comparison result, a bias potential is provided to the semiconductor device to adjust the threshold voltage. <IMAGE>

IPC 1-7

G05F 3/24; G05F 3/20

IPC 8 full level

G05F 3/24 (2006.01)

CPC (source: EP)

G05F 3/242 (2013.01)

Citation (search report)

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