Title (en)

MOS TRANSISTOR FOR HIGH DENSITY INTEGRATION CIRCUITS

Title (de)

MOS-TRANSISTOR FÜR HOCHINTERGIERTE SCHALTKREISE

Title (fr)

TRANSISTOR MOS POUR CIRCUITS A HAUTE DENSITE D'INTEGRATION

Publication

EP 1258042 A1 20021120 (FR)

Application

EP 01909882 A 20010223

Priority

- FR 0100532 W 20010223
- FR 0002237 A 20000223

Abstract (en)

[origin: WO0163677A1] The invention concerns a MOS transistor produced in a silicon film of a SOI substrate (10), said film (13) being lightly doped and having a thickness less than 30 nm, the source (14) and drain (15) contacts being of the Schottky type with the lowest possible Schottky barrier height for the majority carriers, the operating conditions of the transistor being of the accumulative type.

IPC 1-7

H01L 29/78

IPC 8 full level

H01L 29/786 (2006.01); **H01L 29/78** (2006.01)

CPC (source: EP US)

H01L 29/7839 (2013.01 - EP US); **H01L 29/78654** (2013.01 - EP US)

Citation (search report)

See references of WO 0163677A1

Citation (examination)

- JPN J APPL ET AL: "Analysis of Short-Channel Schottky Source/Drain Metal-Oxide-Semiconductor Field-Effect Transistor on Silicon-on-Insulator Substrate and Demonstration of Sub-50-nm n-type Devices with Metal Gate Home Search Collections Journals About Contact us My IOPscience Analysis of Short-Channel Schottky Source/", PHYS. PUBLICATION BOARD JAPANESE JOURNAL OF APPLIED PHYSICS, 1 November 1999 (1999-11-01), pages 6226 - 6231, XP055264286, Retrieved from the Internet <URL:http://iopscience.iop.org/article/10.1143/JJAP.38.6226/pdf>
- SZE S M ED - SZE S M: "Physics of semiconductor devices", 1 January 1981, 19810101, PAGE(S) 32, ISBN: 978-0-471-05661-4, XP002592003

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