Title (en)

PATTERNED INTEGRATED CIRCUIT AND METHOD OF PRODUCTION THEREOF

Title (de)

STRUKTURIERTE INTEGRIERTE SCHALTUNG UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

CIRCUIT INTÉGRÉ À MOTIFS ET PROCÉDÉ DE PRODUCTION DE CELUI-CI

Publication

EP 2311078 A4 20121121 (EN)

Application

EP 09771083 A 20090626

Priority

- US 2009048737 W 20090626
- US 7607908 P 20080626

Abstract (en)

[origin: WO2009158552A1] The present invention relates generally to the field of integrated electronics. More specifically, the present invention relates to patterned graphene-like carbon-based integrated circuits and methods of production thereof. Methods of photo-, electron-beam projection, extreme-ultraviolet, and imprint lithographic patterning and also several thermal patterning methods are disclosed in the present invention.

IPC 8 full level

H01L 21/461 (2006.01); **H01L 29/16** (2006.01); **H01L 51/05** (2006.01)

CPC (source: EP)

H01L 21/288 (2013.01); **H01L 21/76838** (2013.01); **H01L 23/53276** (2013.01); **H01L 29/1606** (2013.01); **H10K 10/462** (2023.02); H01L 2924/0002 (2013.01); H10K 71/40 (2023.02); H10K 71/621 (2023.02); H10K 85/621 (2023.02); H10K 85/624 (2023.02)

Citation (search report)

- [X] US 2004253820 A1 20041216 - DEHEER WALT A [US], et al
- [X] GU GONG ET AL: "Field effect in epitaxial graphene on a silicon carbide substrate", APPLIED PHYSICS LETTERS, AIP, AMERICAN INSTITUTE OF PHYSICS, MELVILLE, NY, US, vol. 90, no. 25, 19 June 2007 (2007-06-19), pages 253507 - 253507, XP012095422, ISSN: 0003-6951, DOI: 10.1063/1.2749839
- [A] F. MOLITOR ET AL: "Local gating of a graphene Hall bar by graphene side gates", PHYSICAL REVIEW B, vol. 76, no. 24, 1 December 2007 (2007-12-01), XP055034729, ISSN: 1098-0121, DOI: 10.1103/PhysRevB.76.245426
- See references of WO 2009158552A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2009158552 A1 20091230; EP 2311078 A1 20110420; EP 2311078 A4 20121121

DOCDB simple family (application)

US 2009048737 W 20090626; EP 09771083 A 20090626