

Title (en)
A METHOD FOR FABRICATING NANOGAP AND NANOGAP SENSOR

Title (de)
VERFAHREN ZUR ERZEUGUNG EINES NANOSPALTS UND NANOSPALTSSENSOR

Title (fr)
PROCEDE POUR FABRIQUER UN NANO-INTERVALLE ET CAPTEUR DE NANO-INTERVALLE

Publication
EP 1938364 A4 20110518 (EN)

Application
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Abstract (en)
[origin: WO2007046582A1] The present invention relates to a method of fabricating a nanogap and a nanogap sensor, and to a nanogap and a nanogap sensor fabricated using the method. The present invention relates to a method of fabricating a nanogap and a nanogap sensor, which can be realized by an anisotropic etching using a semiconductor manufacturing process. According to the method of present invention, the nanogap and nanogap sensor can be simply and cheaply produced in large quantities.

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B81C 1/00087 (2013.01)

Citation (search report)
• [A] WO 2004077503 A2 20040910 - HARVARD COLLEGE [US]
• [A] WO 2004078640 A1 20040916 - UNIV DELFT TECH [NL], et al
• [A] US 2003211502 A1 20031113 - SAUER JON R [US], et al
• [A] EP 1366860 A1 20031203 - ASIA PACIFIC MICROSYSTEM INC [TW]
• [X] HASHIOKA S ET AL: "FABRICATION TECHNIQUE FOR PREPARING NANOGAP ELECTRODES BY CONVENTIONAL SILICON PROCESSES", JAPANESE JOURNAL OF APPLIED PHYSICS, JAPAN SOCIETY OF APPLIED PHYSICS, JP, vol. 44, no. 6A, 1 June 2005 (2005-06-01), pages 4213 - 4215, XP001502351, ISSN: 0021-4922, DOI: 10.1143/JJAP.44.4213
• [A] STORM A J ET AL: "FABRICATION OF SOLID-STATE NANOPORES WITH SINGLE-NANOMETRE PRECISION", NATURE MATERIALS, NATURE PUBLISHING GROUP, LONDON, GB, vol. 2, no. 8, 13 July 2003 (2003-07-13), pages 537 - 540, XP008046585, ISSN: 1476-4660, DOI: 10.1038/NMAT941
• See references of WO 2007046582A1

Citation (examination)
SHINGI HASHIOKA ET AL: "Fabrication Technique for Preparing Nanogap Electrodes by Conventional Silicon Processes", JAPANESE JOURNAL OF APPLIED PHYSICS, vol. 44, no. 6A, 1 June 2005 (2005-06-01), JP, pages 4213 - 4215, XP055395549, ISSN: 0021-4922, DOI: 10.1143/JJAP.44.4213

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