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(71) Applicant (for all designated States except US): **INSTYTUT TECHNOLOGII MATERIAŁÓW ELEKTRONICZNYCH** [—/PL]; Warszawa, 133, Wólczyńska, PL-01-919 Warszawa (PL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **STRUPIŃSKI, Włodzimierz** [PL/PL]; Warszawa, 133, Wólczyńska, PL-01-919 Warszawa (PL).

(74) Agent: **SIELEWIESIUK, Jakub**; AOMB Polska Sp. z o.o., Emilii Plater 53, PL-00-113 Warszawa (PL).

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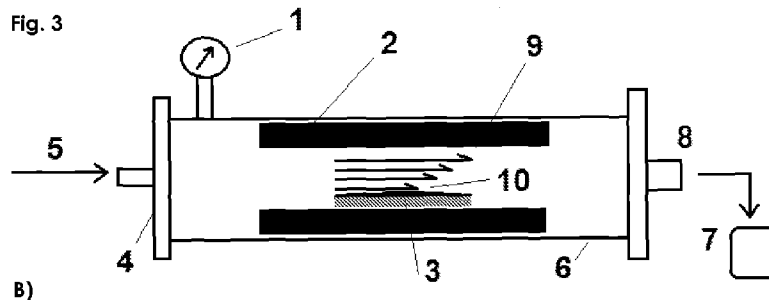
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(54) Title: METHOD OF GRAPHENE MANUFACTURING



(57) Abstract: The present invention relates to a method for manufacturing graphene by vapour phase epitaxy on a substrate comprising a surface of SiC, characterized in that the process of sublimation of silicon from the substrate is controlled by a flow of an inert gas or a gas other than an inert gas through the epitaxial reactor. The invention also relates to graphene obtained by this method.

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INTERNATIONAL SEARCH REPORT

International application No  
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A. CLASSIFICATION OF SUBJECT MATTER  
INV. C01B31/04 C30B25/02 C30B29/02 C30B25/18 C30B29/64  
ADD.  
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B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)  
C01B C30B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, COMPENDEX, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EMTSEV K V ET AL: "Towards wafer-size graphene layers by atmospheric pressure graphitization of silicon carbide", NATURE MATERIALS, NATURE PUBLISHING GROUP, GB, vol. 8, no. 3, 1 March 2009 (2009-03-01), pages 203-207, XP009138388, ISSN: 1476-1122, DOI: 10.1038/NMAT2382 [retrieved on 2009-02-08] cited in the application	1-5,7, 12-17
Y	----- -/--	5-11

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/PL2011/050023

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WEINGART S ET AL: "Influence of the growth conditions of epitaxial graphene on the film topography and the electron transport properties",            PHYSICA E - LOW-DIMENSIONAL SYSTEMS AND NANOSTRUCTURES, ELSEVIER SCIENCE BV, NL, vol. 42, no. 4,            1 February 2010 (2010-02-01), pages 687-690, XP026921958,            ISSN: 1386-9477, DOI:            10.1016/J.PHYSE.2009.11.006            [retrieved on 2009-11-10]            the whole document</p>	1-17
Y	<p>-----</p> <p>STRUPINSKI W ET AL: "Growth of graphene layers on silicon carbide",            MATERIALS SCIENCE FORUM - SILICON CARBIDE AND RELATED MATERIALS 2008: ECSCRM 2008 2009 TRANS TECH PUBLICATIONS LTD CHE, vol. 615 617,            7 September 2008 (2008-09-07), pages 199-202, XP009154211,            DOI:            DOI:10.4028/WWW.SCIENTIFIC.NET/MSF.615-617.199            "Experimental";            the whole document</p> <p>-----</p>	5-11