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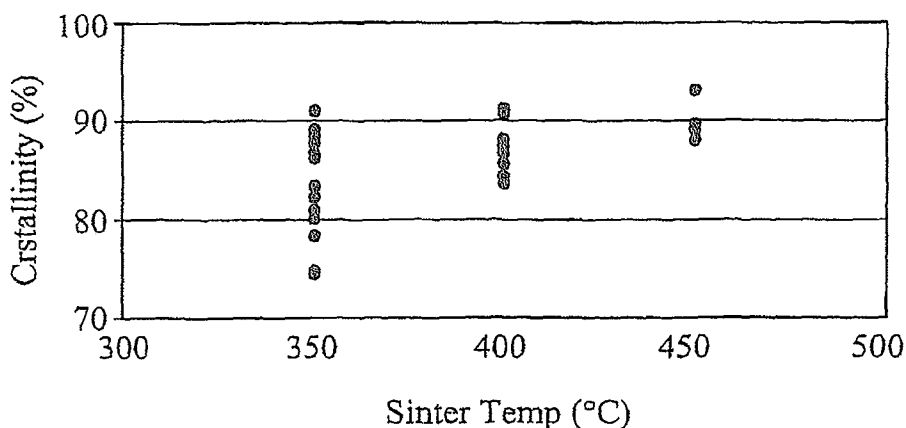
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(54) Title: GERMANIUM-BASED POLYMERS AND PRODUCTS FORMED FROM GERMANIUM-BASED POLYMERS



(57) Abstract: Germanium-based polymers are described. In one embodiment, a germanium-based polymer includes a structure given by the formula: [GeR]_n, wherein n is a non-negative integer that is at least one, and R is selected from a wide variety of groups, such as alkyl groups, alkenyl groups, alkynyl groups, aryl groups, iminyl groups, and so forth. Also described are methods of forming germanium-based polymers, methods of forming nanoparticles from germanium-based polymers, methods of forming nanostructured materials from germanium-based polymers, nanoparticles formed from germanium-based polymers, nanostructured materials formed from germanium-based polymers, and devices formed from germanium-based polymers.

WO 2006/116751 A3

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8): **C22B 41/00**(2007.01);**C08G 79/00**(2007.01);**C07F 7/00**(2007.01)

 USPC: 423/89;528/9,395;556/87;977/777
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 423/89; 528/9, 395; 556/87; 977/777

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 practicable, search terms used)
 CAPLUS and EAST Databases

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, T	CHIU et al., Thermal Behavior and Film Formation from an Organogermanium Polymer/Nanoparticle Precursor, Langmuir, published on the Web 05 May 2006, Vol. 22, No. 12, pp. 5455-5458, see entire document.	1-36
A	US 5,698,483 A (ONG et al.) 16 December 1997, see entire document.	1-36

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	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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