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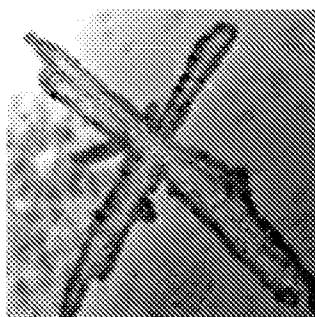
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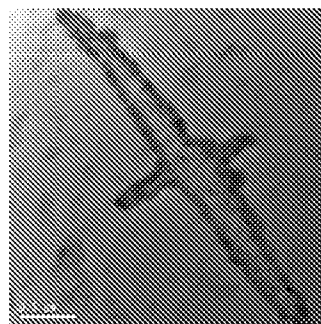
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(54) Title: BIOMIMETIC HYDROXYAPATITE COMPOSITE MATERIALS AND METHODS FOR THE PREPARATION THEREOF



(a)



(b)

Figure 2.

(57) Abstract: The present invention is related to methods for preparing composite materials, which include nanoscale hydroxyapatite, and the composite materials and articles prepared therewith.



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## INTERNATIONAL SEARCH REPORT

International application No.

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| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC(8) - C01B 15/16, 25/26 (2008.04)<br>USPC - 423/308<br>According to International Patent Classification (IPC) or to both national classification and IPC  |   |  |
|--|---|--|
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>USPC - 423/308<br>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched<br>USPC - 423/311; 623/23.56 (see search terms below)<br>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)<br>PUBWEST (PGPB,USPT,USOC,EPAB,JPAB) Terms - Biomimetic Hydroxyapatite bone nano protein precipitate tribasic phosphate citric ammonium hydroxide buffer colloidal supernatant soak matrix biomarker alendronate<br>Google - hydroxyapatite precipitate citric ammonium-hydroxide buffer; Hydroxyapatite bone nano protein precipitate  |   |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>  |   |  |
| Category*  | Citation of document, with indication, where appropriate, of the relevant passages                        | Relevant to claim No.  |
| Y  | US 6,887,488 B2 (CUI et al.) 03 May 2005 (03.05.2005) entire document                                     | 1-21, 24-26, 28, 47-51   |
| Y  | US 5,783,217 A (LEE et al.) 21 Jul 1998 (21.07.1998) col 10, ln 10-14                                     | 1-21, 24-26, 28, 47-51   |
| Y  | US 6,387,414 B1 (AKASHI et al.) 14 May 2002 (14.05.2002) col 5, ln 41-44; col 15, ln 15-29                | 5-6, 13  |
| Y  | US 6,013,591 A (YING et al.) 11 Jan 2000 (11.01.2000) col 3, ln 30-41; col 29, ln 50-56; col 30, ln 62-67 | 19, 24; 48-49  |
| Y  | US 2005/0186249 A1 (RIMAN et al.) 25 Aug 2005 (25.08.2005) para [0044]                                    | 2-3, 25-26 and 28  |
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| Name and mailing address of the ISA/US<br>Mail Stop PCT, Attn: ISA/US, Commissioner for Patents<br>P.O. Box 1450, Alexandria, Virginia 22313-1450<br>Facsimile No. 571-273-3201  |   | Authorized officer:<br>Lee W. Young<br>PCT Helpdesk: 571-272-4300<br>PCT OSP: 571-272-7774 |