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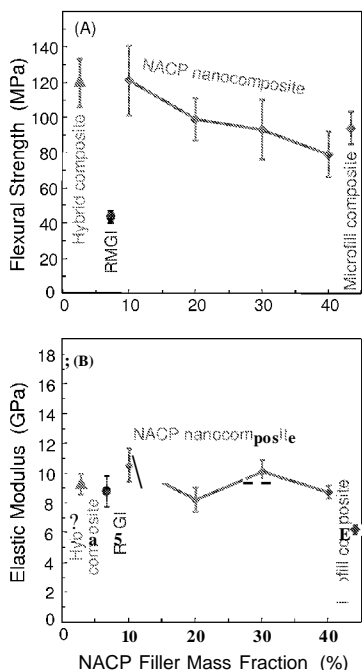
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[Continued on nextpage]

(54) Title: DENTAL COMPOSITES COMPRISING NANOPARTICLES OF AMORPHOUS CALCIUM PHOSPHATE

Figure 8



(57) Abstract: Described herein are dental composites comprising amorphous calcium phosphate nanoparticles and methods of making and using the same. The dental composites display increased Ca and P04 release, improved mechanical properties, and improved antibacterial properties. Anti-bacterial agents, such as quaternary ammonium salts or silver-containing nanoparticles may be included in the composites.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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PCT/US2011/042550**A. CLASSIFICATION OF SUBJECT MATTER****A61K 47/02(2006.01)i, A61K 47/30(2006.01)i, A61K 9/16(2006.01)i, A61K 6/02(2006.01)i, A61P 1/02(2006.01)1**

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)

A61K 47/02; C08L 31/00; A61F 2/00; A61C 5/10; C09K 3/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal), PubMed, JPO, USPTO, Google & Keywords: dental, nanoparticle, amorphous calcium phosphate, resin, filler

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2009-0208909 AI (RICHARD P. RUSIN et al.) 20 August 2009 See abstract ; paragraph [0056] ; claims 1,4,6,10,15,17,44.	1-11,25-33 12-24,34-55
A	US 2005-0038135 AI (SHUHUA JIN et al.) 17 February 2005 See abstract ; all claims .	1-55
A	US 2003-0212194 AI (WEITA0 JIA) 13 November 2003 See abstract ; all claims .	1-55

 Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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