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(54) Title: NOVEL NANOPARTICLES FOR BIOFILM TARGETING

(57) Abstract: The present invention is directed to novel compositions and methods utilizing nanoparticles comprising protein cages for delivery of imaging and antimicrobial agents to biofilm forming bacterial colonies.



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**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US 07/73529

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC(8) - A61K 39/12 (2008.04)  
USPC - 424/204.1  
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)  
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USPC - 424/204.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
USPC - 435/235.1 and Freeform (search terms provided below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
PubWest, DialogPRO, Google Patent, Google Scholar, PubMed/Medline, WIPO  
Search Terms Used: protein, cage, HIV, infection, endocarditis, osteomyelitis, tissue, surgical, implants, grafted, biomaterials, viral, bacterial, switch, genetically, chemically, modified, nosocomial, biofilm and combinations thereof.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| Y         | US 2004/0115132 A1 (Young et al.) 17 June 2004 (17.06.2004) Esp., para [0022], [0023], [0026], [0027], [0029], [0030], [0031], [0035], [0036], [0045], [0047], [0065], [0075], [0076], [0078], [0079], [0092], [0101], [0102], [0110], [0126], [0150], [0162]. | 1 - 69                |
| Y         | US 2003/0175246 A1 (Schaak) 18 September 2003 (18.09.2003) Esp., para [0008], [0009], [0030].  | 1 - 69                |
| Y         | US 2006/0014136 A1 (Scott et al.) 19 January 2006 (09.01.2006) Esp., para [0004], [0010], [0013].  | 31 - 35               |

Further documents are listed in the continuation of Box C.

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| Date of the actual completion of the international search<br>23 August 2008 (23.08.2008) | Date of mailing of the international search report<br><b>29 AUG 2008</b> |
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