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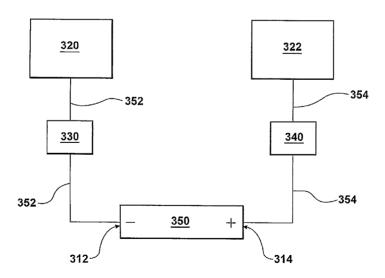
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(54) Title: PROPHYLACTIC BACTERICIDAL IMPLANT



(57) Abstract: A medical implant system is described for inhibiting infection associated with a joint prosthesis implant. An inventive system includes an implant body made of a biocompatible material which has a metal component disposed on an external surface of the implant body. A current is allowed to flow to the metal component, stimulating release of metal ions toxic to microbes, such as bacteria, protozoa, fungi, and viruses. One detailed system is completely surgically implantable in the patient such that no part of the system is external to the patient while the system is in use. In addition, externally controlled devices are provided which allow for modulation of implanted components.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61F 2/02, 2/28, 2/30; A61L 2/00, 33/00 (2006.01) USPC - 623/11.11, 16.11, 18.11; 427/2.1; 422/28; 607/116 According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
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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) WEST US Patents Full-Text			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	ppropriate, of the relevant passages	Relevant to claim No.
Υ	US 6,120,502 A (Michelson) 19 September 2000 (19.09.2000), summary, column 8 (line 62-67) column 12 (line 25-57), column 7 (line 1-67), Figure 8A.		1-33
Υ	US 6,582,715 B1 (Barry et al.) 24 June 2003 (24.06.2003), Abstract, Column 4, lines 54-64, column 6, lines 7-10.		1-33
Υ	US 6,579,539 B2 (Lawson et al.) 17 June 2003 (17.06.2003), column 3 (line3-5), summary, claim 29.		8
Y	US 6,393,323 B1 (Sawan et al.) 21 May 2002 (21.05.2	2002), column 8 (line 9-39).	13, 15-17, 19
Furthe	er documents are listed in the continuation of Box C.		
Special categories of cited documents: 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 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family 	
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	

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INTERNATIONAL SEARCH REPORT

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)			
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:			
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:			
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:			
3. Claims Nos.: 23 because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).			
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)			
This International Searching Authority found multiple inventions in this international application, as follows:			
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.			
2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.			
As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:			
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:			
Remark on Protest The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee. The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation. No protest accompanied the payment of additional search fees.			

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