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出典：米国政府（米軍）

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- ・ 米国政府（米軍）から出願されている特許（部分抜粋）

メトロニダゾールをアトピー性皮膚炎に使用する目的で特許出願をされているもので、この出願に関するものは 380 頁近くあるので抜粋して収載いたします。

- |              |                |                                      |
|--------------|----------------|--------------------------------------|
| 1 頁（表紙）      | ：(71)Applicant | ・ UNITED STATES GOVERNMENT<br>（米国政府） |
| 2 頁（ 2 3 4 ） | ： 6 行目         | ・ metromidazole （メトロニダゾール）           |
| 3 頁（ 2 6 6 ） | ： 1 9 行目       | ・ atopic dermatitis （アトピー性皮膚炎）       |



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>A61K 9/52, 47/30</b>	<b>A1</b>	(11) International Publication Number: <b>WO 98/32427</b> (43) International Publication Date: 30 July 1998 (30.07.98)
<p>(21) International Application Number: PCT/US98/01556</p> <p>(22) International Filing Date: 27 January 1998 (27.01.98)</p> <p>(30) Priority Data: 08/789,734 27 January 1997 (27.01.97) US</p> <p>(71) Applicant (for all designated States except US): UNITED STATES GOVERNMENT as represented by THE SECRETARY OF THE ARMY [US/US]; Intellectual Property Law Division, OTJAG, DA, Suite 713, 901 North Stuart Street, Arlington, VA 22203-1837 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): SETTERSTROM, Jean, A. [US/US]; 700 Hampton Trace Lane, Alpharetta, GA 30201 (US). VAN HAMONT, John, E. [US/US]; 160A Gardiner Loop, West Point, NY 10996 (US). REID, Robert, H. [US/US]; 10807 McComas Court, Kensington, MD 20895 (US). JACOB, Elliot [US/US]; 11529 Dafford Lane, Silver Spring, MD 20902 (US). JEYANTHI, Ramasubbu [US/US]; 9725 Clocktower Lane #301, Columbia, MD 21046 (US). BOEDEKER, Edgar, C. [US/US]; 7505 Bybrook Lane, Chevy Chase, MD 20815 (US). MCQUEEN, Charles, E. [US/US]; 16805 Ethelwood Terrace, Olney, MD 20832 (US). TICE, Thomas, R. [US/US]; 1915 Forest River</p>	<p>Court, Birmingham, AL 35244 (US). ROBERTS, F., Donald [US/US]; 2 Bridge Path Circle, Dover, MA 02030 (US). FRIDEN, Phil [US/US]; 32 Washington Street, Bedford, MA 01730 (US).</p> <p>(74) Agent: BELLAMY, Werten, F., W.; Intellectual Property Law Division, Office of The Judge Advocate General, DA, Suite 713, 901 North Stuart Street, Arlington, VA 22203-1837 (US).</p> <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, <b>JP</b>, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>	
(54) Title: THERAPEUTIC TREATMENT AND PREVENTION OF INFECTIONS WITH A BIOACTIVE MATERIAL ENCAPSULATED WITHIN A BIODEGRADABLE-BIOCOMPATIBLE POLYMERIC MATRIX		
(57) Abstract <p>Novel burst-free, sustained release biocompatible and biodegradable microcapsules which can be programmed to release their active core for variable durations ranging from 1-100 days in an aqueous physiological environment. The microcapsules are comprised of a core of polypeptide or other biologically active agent encapsulated in a matrix of poly(lactide/glycolide) copolymer, which may contain a pharmaceutically acceptable adjuvant, as a blend of uncapped free carboxyl end group and end-capped forms ranging in ratios from 100/0 to 1/99.</p>		

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1 codeine; dihydrocodienone; meperidine; morphine; non-narcotics  
2 such as salicylates; aspirin; acetaminophen; and d-propoxyphene;  
3 antibiotics such as the cephalosporins including ceflacor and  
4 cefuroxime; chloranphenical; gentamicin; Kanamycin A. Kanamycin  
5 B; the penicillins; ampicillin; amoxicillin; streptomycin A;  
6 antimycin A; chloropamtheniol; metromidazole; oxytetracycline  
7 penicillin G; the tetracyclines; including minocycline; fluoro-  
8 quinolones including ciprofloxacin; ofloxacin; macrolides  
9 including clarithromycin; frythromycin; aminioglycosides  
10 including gentamicin; amikacin; tobramycin and kanamycin; beta-  
11 lactams including ampacillin; polymyxin-B; amphotercin-B;  
12 aztrofonam; chloramphenicol; fusidans; lincosamides;  
13 metronidazole; nitro-furantion; imipenem/cilastin; quinolones;  
14 systemic antibodies including rifampin; polygenes; sulfunamides;  
15 trimethoprim; glycopeptides including vancomycin; teicoplanin and  
16 imidazoles; anti-cancer agents; including anti-kaposi's sarcoma;  
17 anti-convulsants such as mephenytoin; phenobarbital;  
18 trimethadione; anti-emetics such as triethylperazine;  
19 antihistamines such as chlorophinazine; dimenhydrinate;  
20 diphenhydramine; perphenazine; tripelethamine and the like; anti-  
21 inflammatory agents such as hormonal agents; hydrocortisone;  
22 prednisolone; prednisone; non-hormonal agents; allopurinol; for  
23 claims water-soluble hormone drugs; antibiotics; antitumor  
24 agents; anti inflammatory agents; antipyretics; analgesics;  
25 antitussives; expectorants; sedatives; muscle relaxants;  
26 antiepileptics; anticulcer agents; antidepressants; antiallergic  
27

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1 152. The method of Claim 145 wherein the beta-lactam is an  
2 ampicillin.

3  
4 153. The method of Claim 152 wherein the polymeric matrix  
5 consists essentially of a poly(DL-lactide-co-glycolide) wherein  
6 the relative ratio between the amount of lactide and glycolide  
7 (L/G) component is within the range of 48/52 to 58/42.

8  
9 154. The method of Claim 152 wherein the ampicillin is present  
10 in an amount of from 5 to 60 percent and the amount of polymeric  
11 matrix is from 40 to 95 percent.

12  
13 155. The process of using the composition of Claim 1 to treat  
14 humans in need, thereof, suffering from diseases and/or ailments  
15 from the group consisting of: viral infections; bacterial  
16 infections; fungal infections; parastic infections and more  
17 specific diseases and/or ailments; such as as, aids; alzheimer's  
18 dementia; angiogenesis diseases; apthour ulcers in AIDS  
19 patients; asthma; atopic dermatitis; psoriasis; basal cell  
20 carcinoma; benign prostatic hypertrophy; blood substitute; blood  
21 substitute in surgery patients; blood substitute in trauma  
22 patients; breast cancer; breast cancer; cutaneous & metastatic;  
23 cachexia in AIDS; campylobacter infection; cancer; pneomnia;  
24 sexually transmitted diseases (STDs); cancer; viral dieases;  
25 candida albicians in AIDS and cancer; candidiasis in HIV  
26 infection; pain in cancer; pancreatic cancer; parkinson's