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

(19) World Intellectual Property Organization
International Bureau

162162

(43) International Publication Date
4 April 2002 (04.04.2002)

PCT

(10) International Publication Number
WO 02/026212 A3

(51) International Patent Classification[7]: A61K 9/16

(21) International Application Number: PCT/US01/30541

(22) International Filing Date:
28 September 2001 (28.09.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/236,077 28 September 2000 (28.09.2000) US

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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW

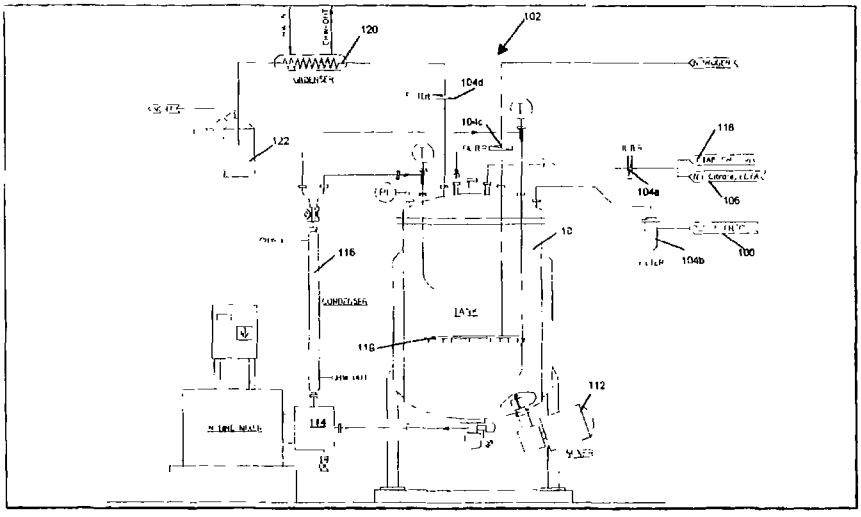
(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:
— *with international search report*

(88) Date of publication of the international search report:
27 March 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette

(54) Title: MICROPARTICLE COMPOSITIONS AND METHODS FOR THE MANUFACTURE THEREOF



(57) Abstract: Microparticles with adsorbed complexes of macromolecule and detergent, methods of making such microparticles, and uses thereof, are disclosed. The microparticles comprise a polymer, such as a poly(α-hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polyanhydride, and the like, and are formed using cationic, anionic, or nonionic detergents. The surfaces of the microparticles have absorbed thereon a complex of biologically active macromolecules, such as nucleic acids, polypeptides, antigens, and adjuvants, and a detergent. Preferred polymers are poly(D,L-lactide-co-glycolides), more preferably those having a lactide/glycolide molar ratio ranging from 40:60 to 60.40 and having a molecular weight ranging from 30,000 Daltons to 70,000 Daltons. Preferred macromolecules are bacterial and viral antigens (such as HIV antigens, meningitis B antigens, streptococcus B antigens, and Influenza A hemagglutinin antigens) as well as polynucleotides that encode for such antigens.

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