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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 January 2003 (09.01.2003)

PCT

(10) International Publication Number
WO 03/002091 A3

(51) International Patent Classification[7]: A61K 9/16, 38/09, A61P 5/06, 15/00, A61K 9/50

(21) International Application Number: PCT/JP02/06526

(22) International Filing Date: 28 June 2002 (28.06.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2001-199462 29 June 2001 (29.06.2001) JP
2001-340980 6 November 2001 (06.11.2001) JP

(71) Applicant *(for all designated States except US)*: **TAKEDA CHEMICAL INDUSTRIES, LTD.** [JP/JP]; 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0045 (JP).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **YAMAMOTO, Kazumichi** [JP/JP]; 341-11-1109, Shimizu-cho, Kawaramachi-dori Nijo-agaru, Nakagyo-ku, Kyoto-shi, Kyoto 604-0911 (JP). **YAMADA, Akiko** [JP/JP]; 313-501, Sashimono-cho, Kawaramachi-dori Ebisugawa-agaru, Nakagyo-ku, Kyoto-shi, Kyoto 604-0903 (JP). **HATA, Yoshio** [JP/JP]; 531-161, Azahonbetsu, Shikabe-cho, Kayabe-gun, Hokkaido 041-1404 (JP).

(74) Agents: **AOYAMA, Tamotsu** et al.; AOYAMA & PARTNERS, IMP Building, 3-7, Shiromi 1-chome, Chuo-ku, Osaka-shi, Osaka 540-0001 (JP).

(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, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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:
24 July 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.

WO 03/002091 A3

(54) Title: SUSTAINED-RELEASE COMPOSITION COMPRISING LACTIC ACID-GLYCOLIC ACID COPOLYMER AND PROCESS FOR PRODUCING THE SAME

(57) Abstract: Present invention is to provide a sustained-release composition which contains a physiologically active substance in high content even when gelatin is not included, and suppresses its initial excessive release and, thus, can achieve a stable release rate over about one month. A sustained-release composition containing a lactic acid-glycolic acid polymer having a ratio or weight average molecular weight and number average molecular weight of about 1.90 or lower, or a salt thereof, and a physiologically active substance.