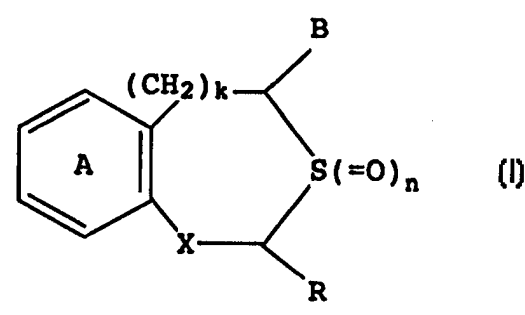




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/JP97/03608 (22) International Filing Date: 8 October 1997 (08.10.97) (30) Priority Data: 8/268704 9 October 1996 (09.10.96) 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 (JP). (72) Inventors; and (75) Inventors/Applicants (for US only): TAKECHI, Nobuyuki [JP/JP]; 3-11-711, Nonakaminami 2-chome, Yodogawa-ku, Osaka-shi, Osaka 532 (JP). NONOMURA, Muneo [JP/JP]; 10-13-103, Kasugacho 5-chome, Toyonaka-shi, Osaka 560 (JP). HIGUCHI, Shigehiro [JP/JP]; 6-10-307, Mukonosu 7-chome, Amagasaki-shi, Hyogo 661 (JP). BEPPU, Toshiharu [JP/JP]; 5-21, Kamigakicho, Nishinomiya-shi, Hyogo 662 (JP). (74) Agents: ASAHINA, Tadao et al.; Osaka Plant of Takeda Chemical Industries, Ltd., 17-85, Jusohonmachi 2-chome, Yodogawa-ku, Osaka-shi, Osaka 532 (JP).</p>		<p>(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ARIPO patent (GH, 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).  <b>Published</b> <i>With international search report.</i> (88) Date of publication of the international search report: 11 June 1998 (11.06.98)</p>
<p>(54) Title: A METHOD FOR PRODUCING A MICROPARTICLE</p>		
<p>(57) Abstract</p>		
<p>This invention provides a method for producing a microparticle which comprises pulverizing a solid preparation comprising a compound represented by formula (I), wherein ring A is an optionally substituted benzene ring; R is a hydrogen atom or an optionally substituted hydrocarbon group; B is an optionally esterified or amidated carboxyl group; X is -CH(OH)- or -CO-; k is 0 or 1; and n is 0, 1 or 2 or a pharmaceutically acceptable salt thereof and a biodegradable polymer of <math>\alpha</math>-hydroxycarboxylic acid in the presence of a pulverizing auxiliary, which can provide microparticles which are less adhesive and involve less aggregation and are thus excellent in drug entrapment ratio and control of drug release in a desired particle size.</p>		 <p style="text-align: right;">(I)</p>

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## INTERNATIONAL SEARCH REPORT

Intern. application No.

PCT/JP 97/03608

## A. CLASSIFICATION OF SUBJECT MATTER

IPC6: A61K 9/16, A61K 47/12, A61K 31/66, A61K 31/38  
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)

IPC6: A61K

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)

EMBASE, MEDLINE, WPI, USPATFULL, CAPLUS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 9216193 A1 (CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE), 1 October 1992 (01.10.92), page 3, line 19 - line 30; page 5, line 10 - line 19, claims ---	1-14
Y	EP 0719782 A1 (TAKEDA CHEMICAL INDUSTRIES, LTD.), 3 July 1996 (03.07.96), claims ---	1-14
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Y	EP 0376197 A1 (TAKEDA CHEMICAL INDUSTRIES, LTD.), 4 July 1990 (04.07.90), claims ---	1-14

 Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP 97/03608

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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03/02/98

International application No.

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