

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 April 2003 (03.04.2003)

PCT

(10) International Publication Number
WO 03/026582 A3

(51) International Patent Classification⁷: **C07C 69/76**

(21) International Application Number: PCT/US02/30671

(22) International Filing Date:
26 September 2002 (26.09.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/325,657 26 September 2001 (26.09.2001) US

(71) Applicant (for all designated States except US): **EMISPHERE TECHNOLOGIES INC.** [US/US]; 765 Old Saw Mill River Road, Tarrytown, NY 10591 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BERNADINO, Joseph, N.** [US/US]; 8 Ocean Drive West, Stamford, CT 06902 (US).

(74) Agents: **LUDWIG, Peter, S.** et al.; Darby & Darby P.C., P.O. Box 5257, New York, NY 10150-5257 (US).

(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, KP, 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, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, 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:
16 October 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 03/026582 A3

(54) Title: METHOD OF PREPARING PHENOXY ALKANOIC, ALKENOIC, AND ALKYNIC ACIDS AND SALTS THEREOF VIA A DICARBOXYLATE INTERMEDIATE

(57) Abstract: The present invention relates to a method of preparing a phenoxy alkanolic, alkenolic, or alkynolic acid or a salt thereof from a phenoxy containing compound via a dicarboxylate intermediate. The phenoxy alkanolic, alkenolic, and alkynolic acids and salts thereof prepared by this method are suitable for use in composition for delivering active agents via oral or other routes of administration to animals. Furthermore, the present invention relates to phenoxy dicarboxylic acids and their salts for delivering active agents, such as biologically or chemically active agents, to a target.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/30671

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : CO7C 69/76
 US CL : 560/061

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)
 U.S. : 560/061

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)
 STN CAS file ref. STRUCTURE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5025031 A (LO, Y et al) 18 June 1991 Column 7, Preparation 1	1-6, 20-24
---		-----
Y		7-19

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

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search: 21 FEBRUARY 2003 (21.02.03)
 Date of mailing of the international search report: 05 JUN 2003

Name and mailing address of the ISA/US: Commissioner of Patents and Trademarks, Box PCT, Washington, D.C. 20231, Facsimile No. (703)305-3230
 Authorized officer: Paul J. Killos (with signature), Telephone No. 703-308-1235