

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 November 2002 (07.11.2002)

PCT

(10) International Publication Number
WO 2002/087512 A3

(51) International Patent Classification⁷: **A61K 9/22**,
9/24, 9/26, 9/30, 9/32, 9/36

(21) International Application Number:
PCT/US2002/014024

(22) International Filing Date: 2 May 2002 (02.05.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/288,211 2 May 2001 (02.05.2001) US

(71) Applicant (for all designated States except US): **EURO-
CELTIQUE, S.A.** [LU/LU]; 122 Boulevard de la Petrusse,
L-2330 Luxembourg (LU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **OSHLACK, Ben-
jamin** [US/US]; 351 East 84th Street, New York, NY
10028 (US). **WRIGHT, Curtis** [US/US]; 1 Jarvis Street,
Norwalk, CT 06851 (US). **PRATER, Derek** [GB/GB]; 28
Pearson Close, Milton, Cambridge (GB).

(74) Agents: **DAVIDSON, Clifford, M.** et al.; Davidson,
Davidson & Kappel, LLC, 14th floor., 485 Seventh Av-
enue, New York, NY 10018 (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, 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
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
19 February 2004

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ONCE-A-DAY OXYCODONE FORMULATIONS

(57) Abstract: The invention is directed to sustained release formulations containing oxycodone or a pharmaceutically acceptable salt thereof which provide a mean C_{t24}/C_{tmax} oxycodone ratio of 0.6 to 1.0 or 0.7 to 1 after oral administration at steady state to patients and methods thereof.



WO 2002/087512 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/14024

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 9/22, 9/24, 9/26, 9/30, 9/32, 9/36

US CL : 424/451, 456, 457, 468, 469, 472, 473, 474, 475, 480, 482, 484, 486, 488

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)

US CL : 424/451, 456, 457, 468, 469, 472, 473, 474, 475, 480, 482, 484, 486, 488

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,500,227 A (OSHLACK et al) 19 March 1996, see claims 1-25.	1-71
A, P	US 6,294,195 B1 (OSHLACK et al) 25 September 2001, see claims 1-26.	1-71

☐ 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

28 November 2003 (28.11.2003)

Date of mailing of the international search report

10 DEC 2003

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

James M Spear

Telephone No. 703 308 1235

INTERNATIONAL SEARCH REPORT

PCT/US02/14024

Continuation of B. FIELDS SEARCHED Item 3:

WEST 2.0 search terms: matrix, sustained release, delayed release, controlled release, oxycodone, opioid analgesic, C 24, Cmax, bilayered tablet or dosage form, osmotic device, semipermeable membrane, passageway, in-vitro release, bilayer core, osmopolymer