



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

<p>(51) International Patent Classification <sup>7</sup> : <b>C07D 487/04, 207/32 // (C07D 487/04, 209:00, 209:00)</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number:      <b>WO 00/02855</b></p> <p>(43) International Publication Date:        20 January 2000 (20.01.00)</p>
<p>(21) International Application Number:       PCT/US99/15496</p> <p>(22) International Filing Date:               8 July 1999 (08.07.99)</p> <p>(30) Priority Data: 60/092,408                                       10 July 1998 (10.07.98)                       US</p> <p>(71) Applicant (for all designated States except US): MALLINCK-RODT INC. [US/US]; 675 McDonnell Boulevard, P.O. Box 5840, St. Louis, MO 63134 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): DUCHEK, John, R. [US/US]; 5793 Karamar Drive, St. Louis, MO 63128 (US). BUEHLER, Henry, J. [US/US]; 6916 Lake Park Circle, Affton, MO 63123 (US). CASKEY, Douglas, C. [US/US]; 800 Old Mt. Holly Road, Stanley, NC 28164 (US).</p> <p>(74) Agent: BOONE, Jeffrey, S.; Mallinckrodt Inc., 675 McDonnell Boulevard, P.O. Box 5840, St. Louis, MO 63134 (US).</p>	<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 24 February 2000 (24.02.00)</p>	
<p>(54) Title: SYNTHESIS OF COMPOUNDS USEFUL IN THE MANUFACTURE OF KETOROLAC</p>		
<p>(57) Abstract</p> <p>A multi-step method of synthesizing ketorolac, an analgesic compound, is shown. Several of the reactions and intermediate compounds are novel. The reaction sequence begins with the known compound N-2-bromoethylpyrrole.</p>		

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/15496

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 C07D487/04 C07D207/32 //(C07D487/04,209:00,209:00)

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)

IPC 7 C07D

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 practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 000 649 A (SYNTEX INC) 7 February 1979 (1979-02-07) abstract; claims 1,5	1,6,11, 16-18,20
A	US 5 532 381 A (KIM YONG H ET AL) 2 July 1996 (1996-07-02) column 5 -column 6; claims	1,6,11, 16-18,20
A	EP 0 486 807 A (SYNTEX INC) 27 May 1992 (1992-05-27) cited in the application page 10 -page 14; claims 1,12	1,6,11, 16-18,20
A	US 4 458 081 A (MUCHOWSKI JOSEPH M ET AL) 3 July 1984 (1984-07-03) cited in the application column 3 -column 4	1,6,11, 16-18,20
	-/-	

Further documents are listed in the continuation of box C.

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INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 99/15496

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 089 969 A (MUCHOWSKI JOSEPH M ET AL) 16 May 1978 (1978-05-16) cited in the application column 3 -column 4 -----	1,6,11, 16-18,20

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