



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: C07D 471/04, A61K 31/44, 31/505 // (C07D 471/04, 221:00, 221:00) (C07D 471/04, 239:00, 221:00)	A3	(11) International Publication Number: WO 96/15128 (43) International Publication Date: 23 May 1996 (23.05.96)
(21) International Application Number: PCT/US95/14700 (22) International Filing Date: 13 November 1995 (13.11.95) (30) Priority Data: 08/339,051 14 November 1994 (14.11.94) US 08/539,410 6 November 1995 (06.11.95) US (71) Applicant: WARNER-LAMBERT COMPANY [US/US]; 201 Tabor Road, Morris Plains, NJ 07950 (US). (72) Inventors: BLANKLEY, Clifton, John; 3724 Vorhies Road, Ann Arbor, MI 48105 (US). DOHERTY, Annette, Mar- ian; 106 Tulip Tree Court, Ann Arbor, MI 48103 (US). HAMBY, James, Marino; 4390 Chad Court, Ann Arbor, MI 48103 (US). PANEK, Robert, Lee; 404 Kings Way, Can- ton, MI 48188 (US). SCHROEDER, Mel, Conrad; 7858 Ridgeway Court, Dexter, MI 48130 (US). SHOWALTER, Howard, Daniel, Hollis; 3578 Lamplighter Drive, Ann Ar- bor, MI 48103 (US). CONNOLLY, Cleo; 36367 Hammer Lane, Livonia, MI 48152 (US). (74) Agents: RYAN, M., Andrea; Warner-Lambert Company, 201 Tabor Road, Morris Plains, NJ 07950 (US) et al.		(81) Designated States: AM, AU, BG, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KR, KZ, LT, LV, MD, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, UA, UZ, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 11 July 1996 (11.07.96)
(54) Title: 6-ARYL PYRIDO[2,3-d]PYRIMIDINES AND NAPHTHYRIDINES FOR INHIBITING PROTEIN TYROSINE KINASE MEDIATED CELLULAR PROLIFERATION (57) Abstract 6-Aryl pyrido[2,3-d]pyrimidines and naphthyridines are inhibitors of protein tyrosine kinase, and are thus useful in treating cellular proliferation mediated thereby. The compounds are especially useful in treating atherosclerosis, restenosis, psoriasis, as well as bacterial infections.		

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FR	France			VN	Viet Nam
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INTERNATIONAL SEARCH REPORT

 Int'l Application No
 PCT/US 95/14700

A. CLASSIFICATION OF SUBJECT MATTER

 IPC 6 C07D471/04 A61K31/44 A61K31/505 //(C07D471/04,221:00,
 221:00),(C07D471/04,239:00,221:00)

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 6 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.
X	JOURNAL OF MEDICINAL CHEMISTRY, vol. 26, no. 3, 1983, pages 403-411, XP002000852 C. J. BLANKLEY ET AL.: "Antihypertensive Activity ..." see page 407, Table I, compound 39 ---	1,2,4,14
A	JOURNAL OF MEDICINAL CHEMISTRY, vol. 24, no. 4, 1981, pages 382-389, XP002000853 L. R. BENNETT ET AL.: "Antihypertensive Activity ..." see page 386, Table III, compound no. 1 ---	1,2,4,14
A	US,A,3 534 039 (J. DAVOLL) 13 October 1970 cited in the application see claims --- -/--	1,2,4,14

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- "P" document published prior to the international filing date but later than the priority date claimed

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"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.

"&" document member of the same patent family

Date of the actual completion of the international search

18 April 1996

Date of mailing of the international search report

10.05.96

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 95/14700

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,A,3 639 401 (R. F. MEYER) 1 February 1972 cited in the application see claims ---	1,2,4,14
A	US,A,4 271 164 (C. J. BLANKLEY ET AL.) 2 June 1981 cited in the application see claims 1-3 -----	1,2,4,14

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 95/14700

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 54-70 are directed to a method of treatment of (diagnostic method practised on) the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. l. Application No

PCT/US 95/14700

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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