PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C07D 501/59, A61K 31/545 — A1

(11) International Publication Number: WO 95/26966

(43) International Publication Date: 12 October 1995 (12.10.95)

(21) International Application Number: PCT/US95/03976

(22) International Filing Date: 29 March 1995 (29.03.95)

(30) Priority Data:

08/222,262	1 April 1994 (01.04.94)	US
08/369,798	6 January 1995 (06.01.95)	US

(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TT, UA, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, 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), ARIPO patent (KE, MW, SD, SZ, UG).

Published
With international search report.

(71) Applicant: MICROCIDE PHARMACEUTICALS, INC. [US/US]; 850 Maude Avenue, Mountainview, CA 94043 (US).

(72) Inventors: CHRISTENSEN, Burton, G.; 48 Philhawer Road, Lebanon, NJ 08833 (US). CHO, In-Seop; 1656 Notre Dame Drive, Mountain View, CA 94040 (US). GLINKA, Tomasz, W.; 243 Buena Vista Avenue #610, Sunnyvale, CA 94086 (US). HECKER, Scott, J.; 16387 Englewood Avenue, Los Gatos, CA 95032 (US). LEE, Ving, J.; 1335 Caebo Court, Los Altos, CA (US). ZHANG, Zhijia, J.; 770 Crane Avenue, Foster City, CA 94404 (US).

(74) Agents: WARBURG, Richard, J. et al.; Lyon & Lyon, First Interstate World Center, Suite 4700, 633 West Fifth Street, Los Angeles, CA 90071-2066 (US).

RMP

SG 96/1132/3

(54) Title: CEPHALOSPORIN ANTIBIOTICS

(57) Abstract

The present invention includes novel (7*R*)-7-(acylamino)-3-(arylthio)-3-cephem-4-carboxylic acids or their pharmacologically acceptable salts which exhibit antibiotic activity against a wide spectrum of organisms including organisms which are resistant to β-lactam antibiotics and are useful as antibacterial agents. The invention also relates to novel intermediates useful for making the novel compounds of the present invention and to novel methods for producing the novel compounds and intermediate compounds.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	**GB**	United Kingdom	**MR**	Mauritania
AU	Australia	**GE**	Georgia	**MW**	Malawi
BB	Barbados	**GN**	Guinea	**NE**	Niger
BE	Belgium	**GR**	Greece	**NL**	Netherlands
BF	Burkina Faso	**HU**	Hungary	**NO**	Norway
BG	Bulgaria	**IE**	Ireland	**NZ**	New Zealand
BJ	Benin	**IT**	Italy	**PL**	Poland
BR	Brazil	**JP**	Japan	**PT**	Portugal
BY	Belarus	**KE**	Kenya	**RO**	Romania
CA	Canada	**KG**	Kyrgystan	**RU**	Russian Federation
CF	Central African Republic	**KP**	Democratic People's Republic of Korea	**SD**	Sudan
CG	Congo			**SE**	Sweden
CH	Switzerland	**KR**	Republic of Korea	**SI**	Slovenia
CI	Côte d'Ivoire	**KZ**	Kazakhstan	**SK**	Slovakia
CM	Cameroon	**LI**	Liechtenstein	**SN**	Senegal
CN	China	**LK**	Sri Lanka	**TD**	Chad
CS	Czechoslovakia	**LU**	Luxembourg	**TG**	Togo
CZ	Czech Republic	**LV**	Latvia	**TJ**	Tajikistan
DE	Germany	**MC**	Monaco	**TT**	Trinidad and Tobago
DK	Denmark	**MD**	Republic of Moldova	**UA**	Ukraine
ES	Spain	**MG**	Madagascar	**US**	United States of America
FI	Finland	**ML**	Mali	**UZ**	Uzbekistan
FR	France	**MN**	Mongolia	**VN**	Viet Nam
GA	Gabon				

9611556-3