

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 May 2008 (22.05.2008)

PCT

(10) International Publication Number
WO 2008/060865 A3

- (51) International Patent Classification:
A61K 31/35 (2006.01)
- (21) International Application Number:
PCT/US2007/083343
- (22) International Filing Date:
1 November 2007 (01.11.2007)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/599,661 14 November 2006 (14.11.2006) US
- (71) Applicant and
(72) Inventor: RATH, Matthias [DE/NL]; Sourethweg 9 6422
Pc, NL-Heerlen (NL).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): NIEDZWIECKI,
Aleksandra [US/US]; 1394 Heckman Way, San Jose, CA
95129 (US). HARAKEH, Steve [LB/LB]; c/o Biology
Dept., American University of Beirut, P.O. Box 11-0236
(LB).
- (74) Agent: KAMAREI, Ali; 280 Colorado, Palo Alto, CA
94301 (US).
- (81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG,
ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK,
LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW,
MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA,
ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
PT, RO, SE, SI, SK, TR), OAPI (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:
31 July 2008



WO 2008/060865 A3

(54) Title: COMPOSITIONS AND METHODS FOR REDUCING ANTIMICROBIAL RESISTANCE OF MICROBES

(57) Abstract: The instant methods and compositions represent an improvement in reducing antimicrobial resistance of microbes and enhancing antimicrobial activity of drugs. A composition comprising of polyphenols, an ascorbic compound, L-lysine, L-proline, and L-arginine have been found to reduce the antimicrobial resistance of microbe. As such, methods of treating infection, and methods of enhancing antimicrobial activity of drugs are provided herein.

INTERNATIONAL SEARCH REPORT

International application No. PCT/US07/83343
--

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **A61K 31/35(2006.01)**

USPC: **514/456,474**
 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. : 514/456, 474

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 7,041,699 B2 (NETKE et al) 9 May 2006 (09.05.2006), abstract, column 3, column 7, lines 55-60, Example 8, tables 1-8.	1-8, 11-15 and 18 ----- 9, 10, 16, 17 and 19-21
Y	US 5,523,288 A (COHEN et al) 4 June 1996 (04.06.1996), abstract, column 47.	9, 10, 16, 17 and 19-21

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

<p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
---	---

Date of the actual completion of the international search 11 March 2008 (11.03.2008)	Date of mailing of the international search report 27 MAR 2008
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. (571) 273-3201	Authorized officer  Jennifer Kim Telephone No. 703-308-1235