

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
26 November 2020 (26.11.2020)



(10) International Publication Number
WO 2020/236084 A1

(51) International Patent Classification:

C07D 401/14 (2006.01) A61K 31/444 (2006.01)
C07D 405/14 (2006.01) A61P 31/04 (2006.01)
A61K 31/4433 (2006.01)

(21) International Application Number:

PCT/SG2020/050292

(22) International Filing Date:

18 May 2020 (18.05.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10201904492X 17 May 2019 (17.05.2019) SG

(71) Applicants: SINGAPORE HEALTH SERVICES PTE LTD [SG/SG]; 31 Third Hospital Avenue, #03-03 Bowyer Block C, Singapore 168753 (SG). AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 1 Fusionopolis Way, #20-10 Connexis North Tower, Singapore 138632 (SG). TAN TOCK SENG HOSPITAL PTE LTD [SG/SG]; 11 Jalan Tan Tock Seng, Singapore 308433 (SG).

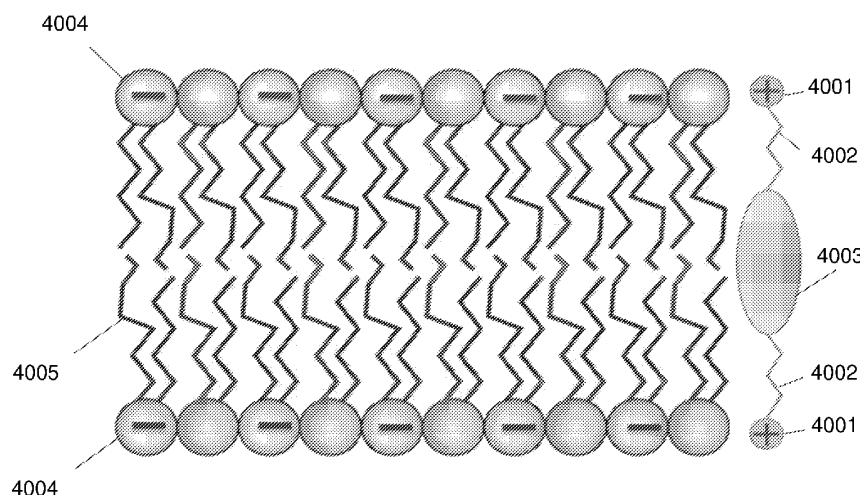
(72) Inventors: AUNG, Thet Tun; Blk 278, #06-187, Toh Guan Road, Singapore 600278 (SG). LI, Jianguo; Blk 361,

#13-22, Chua Chu Kang Ave 3, Singapore 689884 (SG). KOH, Jun Jie; Blk 511, Jelapang Road, #16-44, Singapore 670511 (SG). RAJAMANI, Lakshminarayanan; Blk 226, Westwood Avenue #05-18, Singapore 648357 (SG). BEUERMAN, Roger; The Academia, 20 College Road, Discovery Level 6, Singapore 169856 (SG). TAN, Tiang Hwee Donald; The Academia, 20 College Road, Discovery Level 6, Singapore 169856 (SG). PERIAYAH, Mercy Halleluyah; The Academia, 20 College Road, Discovery Level 6, Singapore 169856 (SG). VERMA, Chandra Shekhar; 30 Biopolis Street, #07-01 Matrix, Singapore 138671 (SG). CHEN, Swaine; 60 Biopolis St, Genome #02-01, Singapore 138672 (SG). BARKHAM, Timothy; Department of Laboratory Medicine, Tan Tock Seng Hospital, 11 Jalan Tan Tock Seng, Singapore 308433 (SG).

(74) Agent: SPRUSON & FERGUSON (ASIA) PTE LTD; P.O. Box 1531, Robinson Road Post Office, Singapore 903031 (SG).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,

(54) Title: MOLECULAR DESIGN OF NEW ANTIBIOTICS AND ANTIBIOTIC ADJUVANTS AGAINST MCR STRAINS



[Fig. 4]

(57) Abstract: The present invention relates to a compound comprising a hydrophobic moiety, a linker and N-containing moiety. The present invention also relates to the method of synthesizing the compound and the use of the compound as an antibiotic or an adjuvant for an antibiotic.

WO 2020/236084 A1

[Continued on next page]

KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*