

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
18 September 2008 (18.09.2008)

PCT

(10) International Publication Number
WO 2008/111916 A1

(51) International Patent Classification:

A61K 8/68 (2006.01) A61K 31/7032 (2006.01)
 A61K 31/00 (2006.01) A61K 35/00 (2006.01)
 A61K 31/133 (2006.01) A61P 25/28 (2006.01)
 A61K 31/164 (2006.01) G01N 33/52 (2006.01)

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KRAUT, Rachel, S.** [US/SG]; Institute of Bioengineering and Nanotechnology, 31 Biopolis Way, The Nanos #04-01, Singapore 138669 (SG). **HORTSCH, Ralf** [DE/DE]; Institute of Bioengineering and Nanotechnology, 31 Biopolis Way, The Nanos #04-01, Singapore 138669 (SG). **ERATHODIYIL, Nandanan** [IN/SG]; Institute of Bioengineering and Nanotechnology, 31 Biopolis Way, The Nanos #04-01, Singapore 138669 (SG).

(21) International Application Number:

PCT/SG2008/000076

(22) International Filing Date: 10 March 2008 (10.03.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/905,805 9 March 2007 (09.03.2007) US

(71) Applicant (for all designated States except US):
AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH [SG/SG]; 20 Biopolis Way, #07-01 Centros, Singapore 138668 (SG).

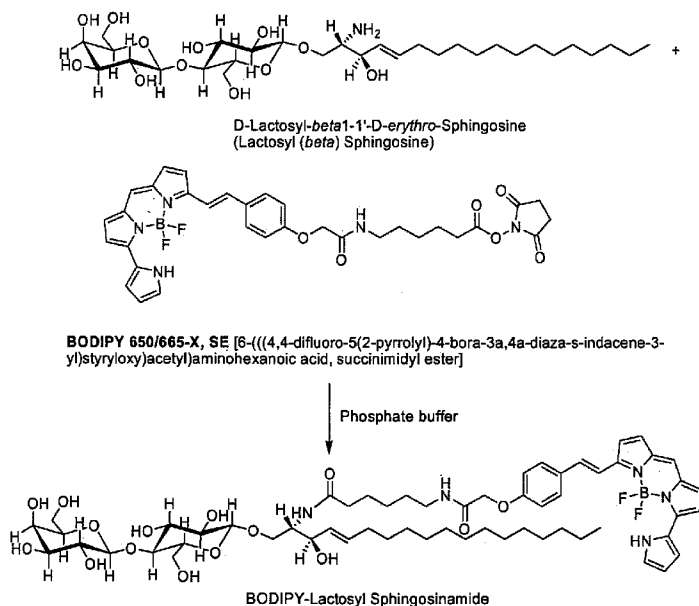
(74) Agent: **YU SARN AUDREY & PARTNERS**; 190 Middle Road, #12-04, Singapore 188979 (SG).

(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, 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,

[Continued on next page]

(54) Title: GLYCOSPHINGOLIPID-AIDED INTRACELLULAR DELIVERY OF CARGO MOLECULES

Scheme 1



SCHEME 1

(57) Abstract: There is presently provided methods relating to delivery of an endocytic cargo to a cellular compartment within a cell, using a glycosphingolipid to direct trafficking of the endocytic cargo within the cell. Such delivery methods are useful in various applications relating to drug delivery and to screening methods for shingolipid related disorders.



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.

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *of inventorship (Rule 4.17(iv))*

(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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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*

(48) Date of publication of this corrected version:

4 December 2008

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

(15) Information about Correction:

see Notice of 4 December 2008