



(51) International Patent Classification:

C07D 249/08 (2006.01) A61K 31/498 (2006.01)
C07D 401/12 (2006.01) A61K 31/55 (2006.01)
C07D 403/12 (2006.01) A61K 31/5377 (2006.01)
C07D 409/12 (2006.01) A61P 35/00 (2006.01)
A61K 31/497 (2006.01) A61P 31/12 (2006.01)
A61K 31/4439 (2006.01) A61P 29/00 (2006.01)
A61K 31/506 (2006.01) A61P 27/02 (2006.01)

(72) Inventors; and

(75) Inventors/Applicants (for US only): SANDANAYAKA, Vincent, P. [US/US]; 10 Laurel Avenue, Northboro, MA 01532 (US). SHACHAM, Sharon [IL/US]; 15 Bontempo Road, Newton, MA 02459 (US). MCCAULEY, Dilara [US/US]; 85 Gore Street, Cambridge, MA 02141 (US). SHECHTER, Sharon [IL/US]; 18 Ivy Lane, Andover, MA 01810 (US).

(21) International Application Number:

PCT/US2012/048319

(74) Agents: ABELLEIRA, Susan, M. et al.; Hamilton, Brook, Smith & Reynolds, P.C., 530 Virginia Rd., P.O. Box 9133, Concord, MA 01742-9133 (US).

(22) International Filing Date:

26 July 2012 (26.07.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/513,428	29 July 2011 (29.07.2011)	US
61/513,432	29 July 2011 (29.07.2011)	US
61/610,178	13 March 2012 (13.03.2012)	US
61/653,588	31 May 2012 (31.05.2012)	US
61/654,651	1 June 2012 (01.06.2012)	US

(71) Applicant (for all designated States except US): KARYOPHARM THERAPEUTICS, INC. [US/US]; 2 Mercer Road, Natick, MA 01760 (US).

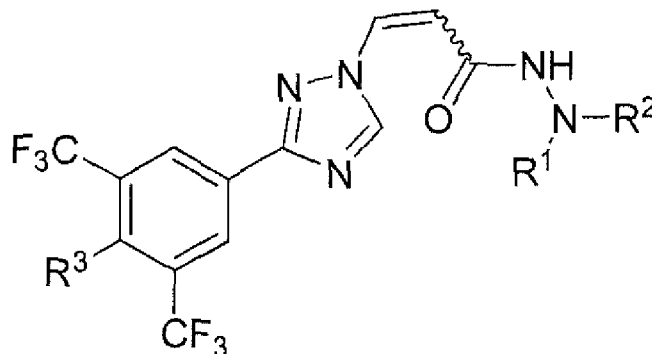
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, 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, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: HYDRAZIDE CONTAINING NUCLEAR TRANSPORT MODULATORS AND USES THEREOF

(I)



(57) Abstract: The invention generally relates to nuclear transport modulators, e.g., CRM1 inhibitors, and more particularly to a compound represented by structural formula (I): or a pharmaceutically acceptable salt thereof, wherein the values and alternative values for the variables are as defined and described herein. The invention also includes the synthesis and use of a compound of structural formula I, or a pharmaceutically acceptable salt or composition thereof, e.g., in the treatment, modulation and/or prevention of physiological conditions associated with CRM1 activity.



Published:

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