



(51) International Patent Classification:

A61K 38/00 (2006.01) A61K 31/195 (2006.01)
A61K 31/28 (2006.01) A61K 33/24 (2006.01)

(21) International Application Number:

PCT/US2009/043821

(22) International Filing Date:

13 May 2009 (13.05.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/052,918 13 May 2008 (13.05.2008) US

(71) Applicant (for all designated States except US): **UNIVERSITY OF KANSAS** [US/US]; Youngberg Hall, 2385 Irving Hill Road, Lawrence, KS 66045-7563 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LAURENCE, Jennifer, Ann Stowell** [US/US]; 1420 New York Street, Lawrence, KS 66044 (US). **VARTIA, Anthony, Andrew** [US/US]; 1144 Pennsylvania Street, Lawrence, KS 66044 (US). **KRAUSE, Mary, Elizabeth** [US/US]; 1501 George Williams Way #C-10, Lawrence, KS 66047 (US).

(74) Agent: **LECOINTE, Michelle, M.**; Baker Botts L.L.P., 98 San Jacinto Blvd., 1500 San Jacinto Center, Austin, TX 78701-4039 (US).

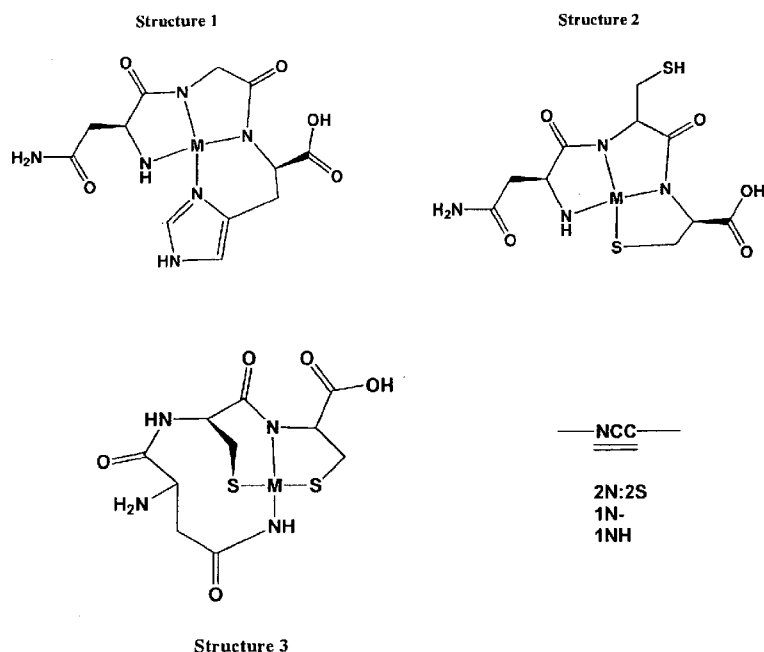
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, 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, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, 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).

[Continued on next page]

(54) Title: METAL ABSTRACTION PEPTIDE (MAP) TAG AND ASSOCIATED METHODS

Figure 1



(57) Abstract: Compositions comprising a tripeptide having the sequence XC_1C_2 ; wherein X is any amino acid such that XC_1C_2 is capable of binding a metal in a square planar orientation or square pyramidal orientation or both; and wherein C_1 and C_2 are the same or different; and wherein C_1 and C_2 individually are chosen from a cysteine and a cysteine-like nonnatural amino acid, as well as metal- XC_1C_2 complexes and methods for forming such complexes.



Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

(88) Date of publication of the international search report:

7 January 2010

Published:

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