

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 January 2010 (21.01.2010)

PCT

(10) International Publication Number
WO 2010/009120 A3

(51) International Patent Classification:

C07D 277/22 (2006.01) **A61P 9/10** (2006.01)
C07D 277/20 (2006.01) **A61P 25/08** (2006.01)
A61K 31/426 (2006.01) **A61P 9/02** (2006.01)

(21) International Application Number:

PCT/US2009/050532

(22) International Filing Date:

14 July 2009 (14.07.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/080,572 14 July 2008 (14.07.2008) US
61/152,572 13 February 2009 (13.02.2009) US

(71) Applicant (for all designated States except US): **FERROKIN BIOSCIENCES, INC.** [US/US]; 2729 Debbie Court, San Carlos, CA 94070 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TAPPER, Amy, E.** [US/US]; 2729 Debbie Court, San Carlos, CA 94070 (US). **RIENHOFF, Hugh, Y.** [US/US]; 2729 Debbie Court, San Carlos, CA 94070 (US). **PARENT, Stephan, D.** [US/US]; 2729 Debbie Court, San Carlos, CA 94070 (US). **ANDRES, Patricia** [US/US]; 2729 Debbie Court, San Carlos, CA 94070 (US).

(74) Agents: **BENNETT, Dennis, A.** et al.; Global Patent Group, Llc, 10411 Clayton Road, Suite 304, Saint Louis, MO 63131 (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, 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, 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, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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

22 April 2010

(54) Title: NOVEL SALTS AND POLYMORPHS OF DESAZADESFERRITHIOCIN POLYETHER ANALOGUES AS METAL CHELATION AGENTS

(57) Abstract: Disclosed herein are new salts and polymorphs of desazadesferrithiocin polyether (DADFT-PE) analogues, as well as pharmaceutical compositions comprising them and their application as metal chelation agents for the treatment of disease. Methods of chelation of iron and other metals in a human or animal subject are also provided for the treatment of metal overload and toxicity.



WO 2010/009120 A3