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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
31 January 2013 (31.01.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/014654 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/IB2012/053872

(22) International Filing Date:
27 July 2012 (27.07.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

100126601	27 July 2011 (27.07.2011)	TW
61/512,685	28 July 2011 (28.07.2011)	US

(71) Applicant *(for all designated States except US)*: **SINOVEDA CANADA, INC.** [CA/CA]; 100 BBDC, 12011 94th Street, Edmonton, Alberta T6N 1H1 (CA).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **TAM, Yun Kau** [CA/CA]; 1059 Tory road, Edmonton, Alberta T6R 3A5 (CA).

(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).

Declarations under Rule 4.17:

— *as to the identity of the inventor (Rule 4.17(i))*

— *of inventorship (Rule 4.17(iv))*

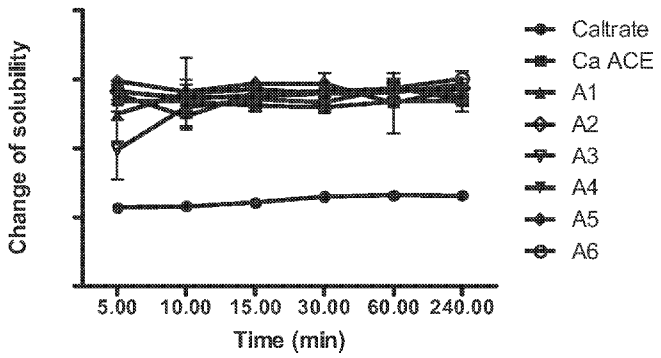
Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

WO 2013/014654 A2

(54) Title: FORMULAS COMPRISING HIGHLY SOLUBLE ELEMENTS AND VITAMIN FOR THE PREVENTION AND AMELIORATION OF OSTEOPOROSIS

FIGURE 1



(57) Abstract: The present invention provides methods of producing dosage forms for formulas of elemental compositions encompassing acetate salts of calcium, magnesium and zinc along with vitamin D 3. The acetate salts could be extracted from natural sources such as pearls, coral, and oyster or compounded using synthetic materials. The dosage and ratio of calcium to magnesium was estimated using in vitro and in vivo estimations. The dosage for promoting bone health and alleviation of osteoporosis is about a quarter to a third of the conventional dose.