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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 December 2009 (10.12.2009)

PCT

(10) International Publication Number
WO 2009/146490 A8

(51) International Patent Classification:
A61K 31/122 (2006.01) *A61K 31/015* (2006.01)
A61K 31/593 (2006.01) *A61K 47/06* (2006.01)
A61P 19/10 (2006.01) *A61K 47/40* (2006.01)

(21) International Application Number:
PCT/AU2009/000693

(22) International Filing Date:
2 June 2009 (02.06.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2008902795 3 June 2008 (03.06.2008) AU

(72) Inventors; and
(71) Applicants : **BIFFIN, John, Ray** [AU/AU]; 1 Greenhills Rd, High Range, NSW 2575 (AU). **REGTOP, Hubertus, Leonardus** [AU/AU]; 18 Murchison Street, Mittagong, NSW 2575 (AU).

(74) Agent: **SPRUSON & FERGUSON**; GPPO Box 3898, Sydney, NSW 2001 (AU).

(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, 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).

Published:

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

(48) Date of publication of this corrected version:
20 January 2011

(15) Information about Correction:
see Notice of 20 January 2011

(54) Title: A METHOD FOR INCREASING BONE DENSITY AND/OR REDUCING ANY OSTEOCHONDRAL DEFECTS IN AN ANIMAL AND A COMPOSITION INCLUDING VITAMIN K

(57) Abstract: There is disclosed herein a method of increasing bone density, maintaining bone density and/or inhibiting loss of bone density and/or reducing osteochondral defects in an animal comprising administering to an animal an effective amount of a composition containing: vitamin Kl, vitamin K2 or a mixture of vitamin K1 and vitamin K2, together with a physiologically acceptable carrier, incipient and/or diluent. Various compositions including vitamin K are also disclosed.

WO 2009/146490 A8