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(54) Title: EFFECTS OF THE ASSOCIATION OF VITAMIN K2 AND VITAMIN D3 IN THE CONSOLIDATION OF A BONE FRACTURE

(57) Abstract: The present invention relates to a composition comprising an association of vitamins for use in treating the consolidation of a bone fracture. In particular, the present invention relates to a composition comprising an association of vitamins for use in treating post-fracture bone regeneration.

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K31/122 A61K31/593 A61P19/00
ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
A61K A61P A23L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, BIOSIS, EMBASE, SCISEARCH, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GIGANTE A. ET AL.: "Vitamin K and D association stimulates in vitro osteoblast differentiation of fracture site derived human mesenchymal stem cells", JOURNAL OF BIOLOGICAL REGULATORS AND HOMEOSTATIC AGENTS, WICHTIG EDITORE, MILAN, IT, vol. 22, no. 1, 1 January 2008 (2008-01-01), pages 35-44, XP009140175, ISSN: 0393-974X paragraph [discussion]	1-10
X	WO 2009/095798 A2 (BEAUTY PEARL GROUP LTD [CN]; TAM YUN KAU [CN]; LIN GE [CN]) 6 August 2009 (2009-08-06) paragraph [0051] - paragraph [0053]; example 7	1-10

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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Venturini, Francesca
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/220094 A1 (BOBYOCK GREGORY EUGENE [US] ET AL) 11 September 2008 (2008-09-11) paragraph [0044]; claims -----	1-10
X	IWAMOTO, J. ET AL.: "Vitamin K2 promotes bone healing in rat femoral osteotomy model with or without glucocorticoid treatment", CALCIF TISSUE INT, vol. 86, March 2010 (2010-03), pages 234-241, XP002606001, paragraph [discussion] -----	1-10
A	KNAPEN M H J ET AL: "Vitamin K2 supplementation improves hip bone geometry and bone strength indices in postmenopausal women", OSTEOPOROSIS INTERNATIONAL ; WITH OTHER METABOLIC BONE DISEASES, SPRINGER-VERLAG, LO LNKD- DOI:10.1007/S00198-007-0337-9, vol. 18, no. 7, 8 February 2007 (2007-02-08), pages 963-972, XP019511781, ISSN: 1433-2965 paragraph [discussion] -----	1-10
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A	SHEA, M.K. & BOOTH, S.L.: "Update on the role of vitamin K in skeletal health", NUTRITION REVIEWS, vol. 66, no. 10, 2008, pages 549-557, XP002606002, paragraph [conclusion] -----	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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