United States Patent [19]

Gall et al.

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[54] **1-HYDROXY-3-(N-METHYL-N-PROPYLAMINO)PROPANE-1,1-DIPHOSPHONIC ACID, PHARMACEUTICAL COMPOSITIONS AND METHODS OF USE**

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[*] Notice: The portion of the term of this patent subsequent to May 22, 2007 has been disclaimed.

[21] Appl. No.: **71,320**

[22] Filed: **Jul. 9, 1987**

[30] **Foreign Application Priority Data**

Jul. 11, 1986 [DE] Fed. Rep. of Germany 3623397

[51] **Int. Cl.**[5] **A61K 31/66**

[52] **U.S. Cl.** **514/108;** 558/158; 562/13

[58] **Field of Search** ..... 260/502.5 C; 558/158; 514/108; 562/13

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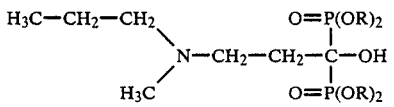
[57] **ABSTRACT**

The present invention provides 1-Hydroxy-3-(N-methyl-N-propylamino)propane-1,1-diphosphonic acid of formula



(I)

wherein R is hydrogen or C_1–C_4 alkyl and the pharmacologically acceptable salts thereof.

The present invention also provides processes for the preparation of a diphosphonic acid of formula I and pharmaceutical compositions containing it for the treatment of diseases of the calcium metabolism.

7 Claims, No Drawings