



[12] Patent

[11] Patent No.: GC 0000107	Number of the Decision to Grant the Patent: 5/211
[45] Date of Publishing the Grant of the Patent: 29/06/2005 4/2005	Date of the Decision to Grant the Patent: 15/03/2005
[21] Application No.: GCC/P/1999/255 [22] Filing Date: 30/08/1999 [30] Priority: [31] Priority No. [32] Priority date [33] State 981164940 01/09/1998 EP [72] Inventor: Apollon Papadimitriou [73] Owner: F. Hoffmann-Laroche AG., 124 Grenzacherstrasse, CH-4070 Basle, Switzerland [74] Agent: Nasser Ali Kadasa	[51] Int.Cl. ⁷ : A61K 47/48 [56] Cited Documents: - WO 9518856 A (HARVARD COLLEGE; IMP CANCER RES TECH (GB)) 13 July 1995 - WO 9830576 A (BEACHY PHILIP A; PORTER JEFFREY A (US); UNIV JOHNS HOPKINS MED (US)) 16 July 1998 - WO 8504328 A (CETUS CORP) 10 October 1985 - WO 9821227 A (UNIV CALIFORNIA) 22 May 1998 - EP 0179583 A (MERCK & CO INC) 30 April 1986 - WO 9636352 A (CHANDARANA SUBASH; MODI PANKAJ (CA)) 21 November 1996

[54] WATER – SOLUBLE PHARMACEUTICAL COMPOSITIONS IN AN IONIC COMPLEX AND THE USE THEREOF

[57] Abstract: A water-soluble composition containing a complex of an ionic pharmaceutically effective polypeptide selected from the group consisting of hedgehog proteins, bone morphogenetic proteins, growth factors, erythropoietin, thrombopoietin, G-CSF, interleukins and interferons, characterized in that said composition contains, in addition, an amphiphilic compound, said polypeptide and said amphiphilic compound forming an ionic complex, whereby the forming of the complex does not enhance the solubility of said polypeptide, is suitable for increasing the activity of the polypeptide and/or for the delayed release of the polypeptide

No. of claims: 9

No. of figures: 2