PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A61K 38/26, C07K 14/605 — A1

(11) International Publication Number: WO 99/30731

(43) International Publication Date: 24 June 1999 (24.06.99)

(21) International Application Number: PCT/US98/26480

(22) International Filing Date: 14 December 1998 (14.12.98)

(30) Priority Data:
60/069,728 16 December 1997 (16.12.97) US

(71) Applicant *(for all designated States except US)*: ELI LILLY AND COMPANY [US/US]; Lilly Corporate Center, Indianapolis, IN 46285 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: HOFFMANN, James, Arthur [US/US]; 4272 Woodland Streams Drive, Greenwood, IN 46143 (US). HERMELING, Ronald, Norbert [US/US]; 915 East Woodhill Drive, Indianapolis, IN 46227 (US). NARASIMHAN, Chakravarthy [IN/US]; 10744 Putnam Place, Carmel, IN 46032 (US).

(74) Agents: MACIAK, Ronald, S. et al.; Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285 (US).

(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: GLUCAGON-LIKE PEPTIDE-1 CRYSTALS

(57) Abstract

The invention provides individual tetragonal flat rod shaped or plate-like crystals of glucagon-like peptide-1 related molecules, processes for their preparation, compositions and methods of use. The crystal preparations exhibit extended time action *in vivo* and are useful for treating diabetes, obesity and related conditions.

162162

G00002