

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 December 2006 (14.12.2006)

PCT

(10) International Publication Number
WO 2006/132950 A3

(51) International Patent Classification:
A61K 31/74 (2006.01) C08F 20/00 (2006.01)
A61K 31/785 (2006.01)

(21) International Application Number:
PCT/US2006/021395

(22) International Filing Date: 2 June 2006 (02.06.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/687,570 3 June 2005 (03.06.2005) US
60/759,179 13 January 2006 (13.01.2006) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, 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
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
14 June 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THERAPEUTIC POLYMERS AND METHODS OF USE

(57) Abstract: The present invention provides biodegradable therapeutic polymer compositions based on poly(ester amide) (PEA), poly(ester urethane) (PEUR), and poly(ester urea) (PEU) polymers useful for *in vivo* delivery of at least one therapeutic diol or di-acid incorporated into the backbone of the biodegradable polymer. The therapeutic polymer compositions biodegrade *in vivo* by enzymatic action to release therapeutic diols or di-acids from the polymer backbone in a controlled manner over time. The invention compositions are stable, can be lyophilized for transportation and storage, and can be redispersed for administration. Due to structural properties of the PEA and PEUR polymers used, the invention therapeutic polymer compositions provide for high loading of the therapeutic diol or di-acid, as well as optional bioactive agents.



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