(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 August 2001 (23.08.2001)

PCT

(10) International Publication Number
WO 01/60417 A3

(51) International Patent Classification[7]: A61K 51/12, 47/48, 9/127

(21) International Application Number: PCT/NO01/00065

(22) International Filing Date: 21 February 2001 (21.02.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20000855 21 February 2000 (21.02.2000) NO

(71) Applicant *(for all designated States except US)*: **ANTICANCER THERAPEUTIC INVENTIONS AS** [NO/NO]; P.O. Box 96 Blindern, N-0314 Oslo (NO).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **LARSEN, Roy, H.** [NO/NO]; Furuveien 17a, N-1356 Bekkestua (NO). **HENRIKSEN, Gjermund** [NO/NO]; Hagatjernveien 32, N-3050 Mjøndalen (NO).

(74) Agents: **ONSAGERS AS** et al.; P.O. Box 265 Sentrum, N-0103 Oslo (NO).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
7 February 2002

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.

WO 01/60417 A3

(54) Title: RADIOACTIVE THERAPEUTIC LIPOSOMES

(57) Abstract: The present invention relates to a conjugator system comprising liposomes with ionophores, and with chelator solution and alpha-particle emitting radionuclide(s) located inside of the liposome. Furthermore, the method for the preparation of this type of radioactive liposomes is described, as well as use of the system and a kit for preparing the system.