



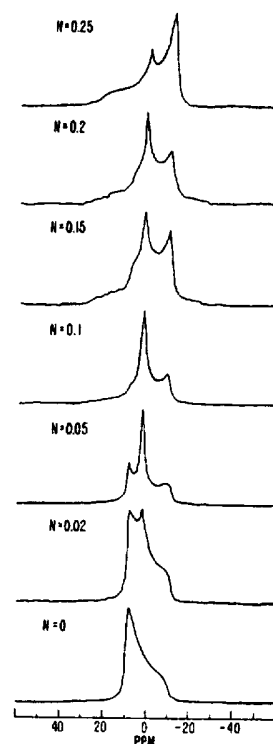
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C08G 63/668, 65/32	A3	(11) International Publication Number: WO 97/38010 (43) International Publication Date: 16 October 1997 (16.10.97)
(21) International Application Number: PCT/CA97/00245 (22) International Filing Date: 10 April 1997 (10.04.97) (30) Priority Data: 60/015,292 11 April 1996 (11.04.96) US (71) Applicant (for all designated States except US): THE UNIVERSITY OF BRITISH COLUMBIA [CA/CA]; Room 331, 2194 Health Sciences Mall, Vancouver, British Columbia V6T 1Z3 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): CULLIS, Pieter, R. [CA/CA]; 3732 West First Avenue, Vancouver, British Columbia V6R 1H4 (CA). CHOI, Lewis, S., L. [CA/CA]; 2986 Coventry Place, Burnaby, British Columbia V5A 3P8 (CA). MONCK, Myrna [CA/CA]; 6405 Elgin Street, Vancouver, British Columbia V5W 3K4 (CA). BAILEY, Austin [CA/US]; Apartment 103, 1826 Vernon Street, N.W., Washington, DC 20009 (US). (74) Agents: ROBINSON, J., Christopher et al.; Fetherstonhaugh & Co., Vancouver Centre, Suite 2200, 650 West Georgia Street, Box 11560, Vancouver, British Columbia V6B 4N8 (CA).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, 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. (88) Date of publication of the international search report: 5 February 1998 (05.02.98)

(54) Title: FUSOGENIC LIPOSOMES

(57) Abstract

The present invention relates to liposomes and virosomes and, more particularly, to liposomal and virosomal delivery systems for transporting materials such as drugs, nucleic acids and proteins.



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INTERNATIONAL SEARCH REPORT

International Application No
PCT/CA 97/00245

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C08G63/668 C08G65/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C08G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 372 807 A (POIANI GEORGE J ET AL) 13 December 1994 see column 12, line 33 - line 45 see column 19, line 25 - line 50 see column 7, line 62 - column 8, line 2 see examples 14-16 see column 11, line 35 - column 12, line 2 ---	19,20, 22,23,25
X	PRAMANICK D. ET AL: "Synthesis and biodegradation of copolyesters derived from glutamic acid." POLYMER BULLETIN, vol. 18, 1987, BERLIN, pages 311-315, XP002041950 see page 312 --- -/-	19,20, 22,23

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the international search

26 September 1997

Date of mailing of the international search report

08.12.97

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INTERNATIONAL SEARCH REPORT

Intern: al Application No

PCT/CA 97/00245

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CHEMICAL ABSTRACTS, vol. 75, no. 2, 12 July 1971 Columbus, Ohio, US; abstract no. 6442r, FONTAN YANES J. ET AL: "Condensation products of glutamic acids with glycols" page 6; XP002041951 see abstract & REV. PLAST. MOD. , vol. 21, no. 173, 1970, pages 927-932, ---	19,20, 22,23
X	US 5 225 532 A (QUENTIN GERARD ET AL) 6 July 1993 see claim 1 ---	22,23
A	DE 24 55 623 A (HOECHST AG) 26 May 1976 see tables 1,2 ---	19-25
A	WO 93 06202 A (PROCTER & GAMBLE) 1 April 1993 see page 5, line 1 - line 5 -----	19-25

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CA 97/ 00245

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. Claims : 1-18

2. Claims : 19-25

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA 97/00245

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