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Meers et al.

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(54) **ENCAPSULATION OF BIOACTIVE COMPLEXES IN LIPOSOMES**

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A61K 9/127 (2006.01)
- (52) **U.S. Cl.** 424/450; 264/4.1; 264/4.3; 264/4.6
- (58) **Field of Classification Search** 424/450, 424/1.21, 9.321, 9.51, 417; 428/402.2; 264/4.1, 264/4.3, 4.6

See application file for complete search history.

(57) **ABSTRACT**

This invention provides a method to prepare liposome-encapsulated bioactive agents such as nucleic acids, comprising complexation of the bioactive agents in reverse micelles prior to forming liposomes, as well as methods of using the liposomes so formed and formulations to deliver nucleic acids to cells.

7 Claims, 23 Drawing Sheets

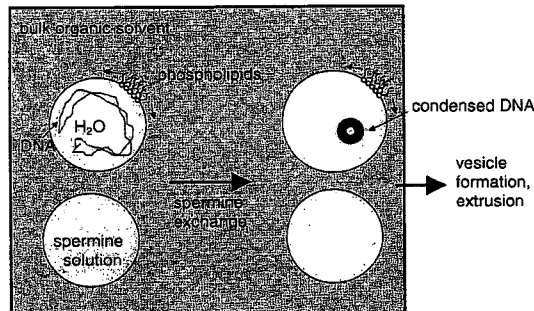


Fig. 1A

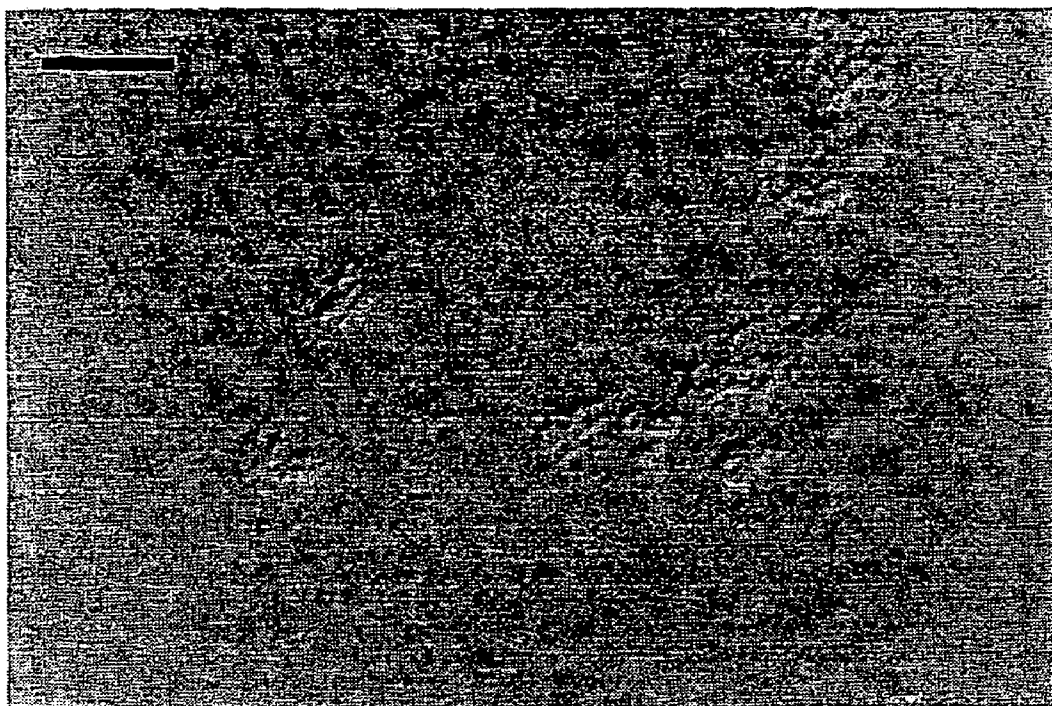


Fig. 1b

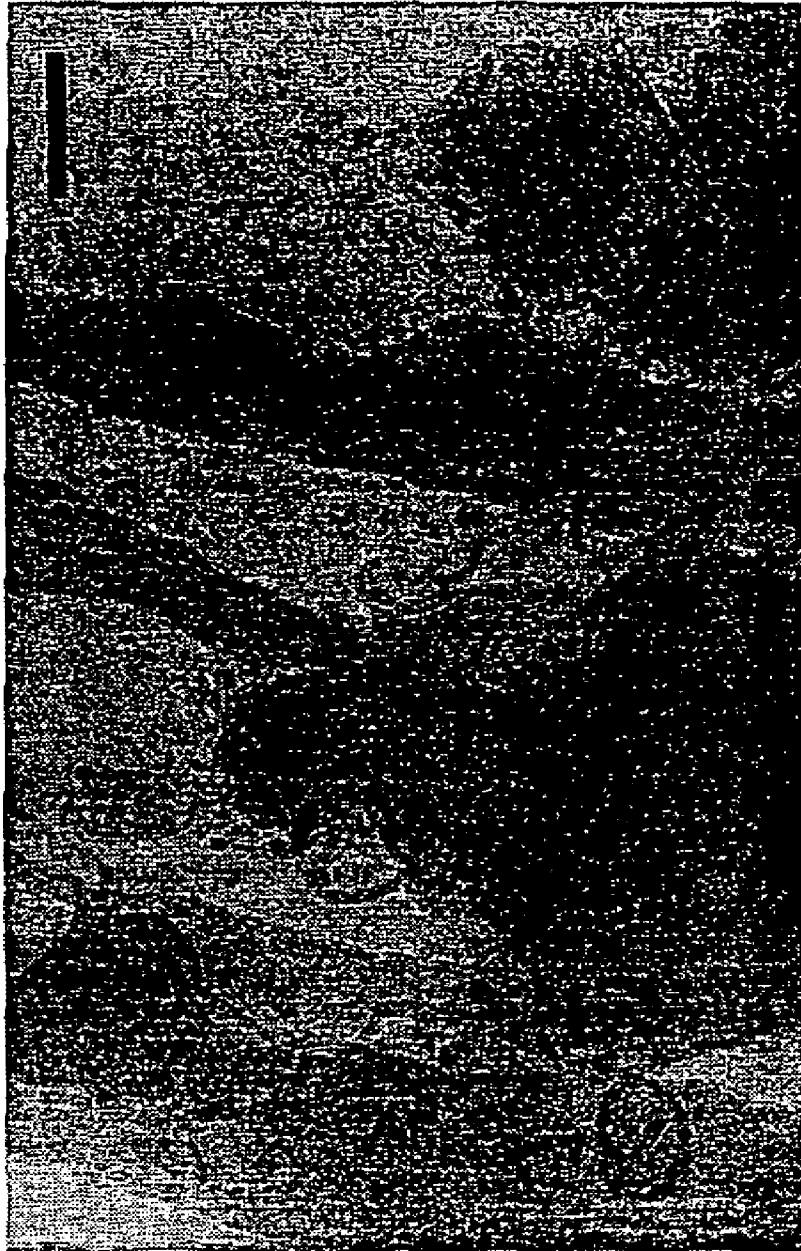


Fig. 2

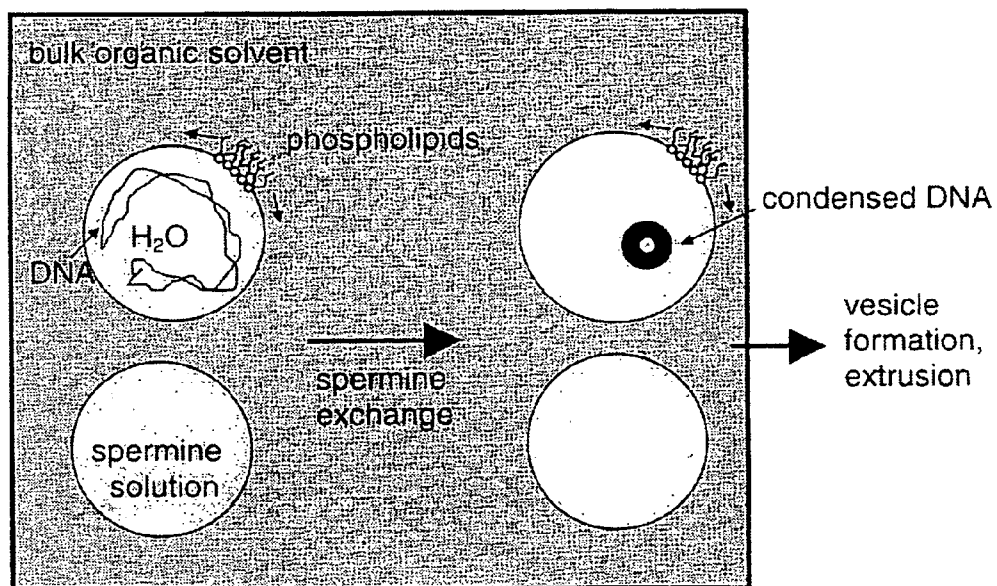
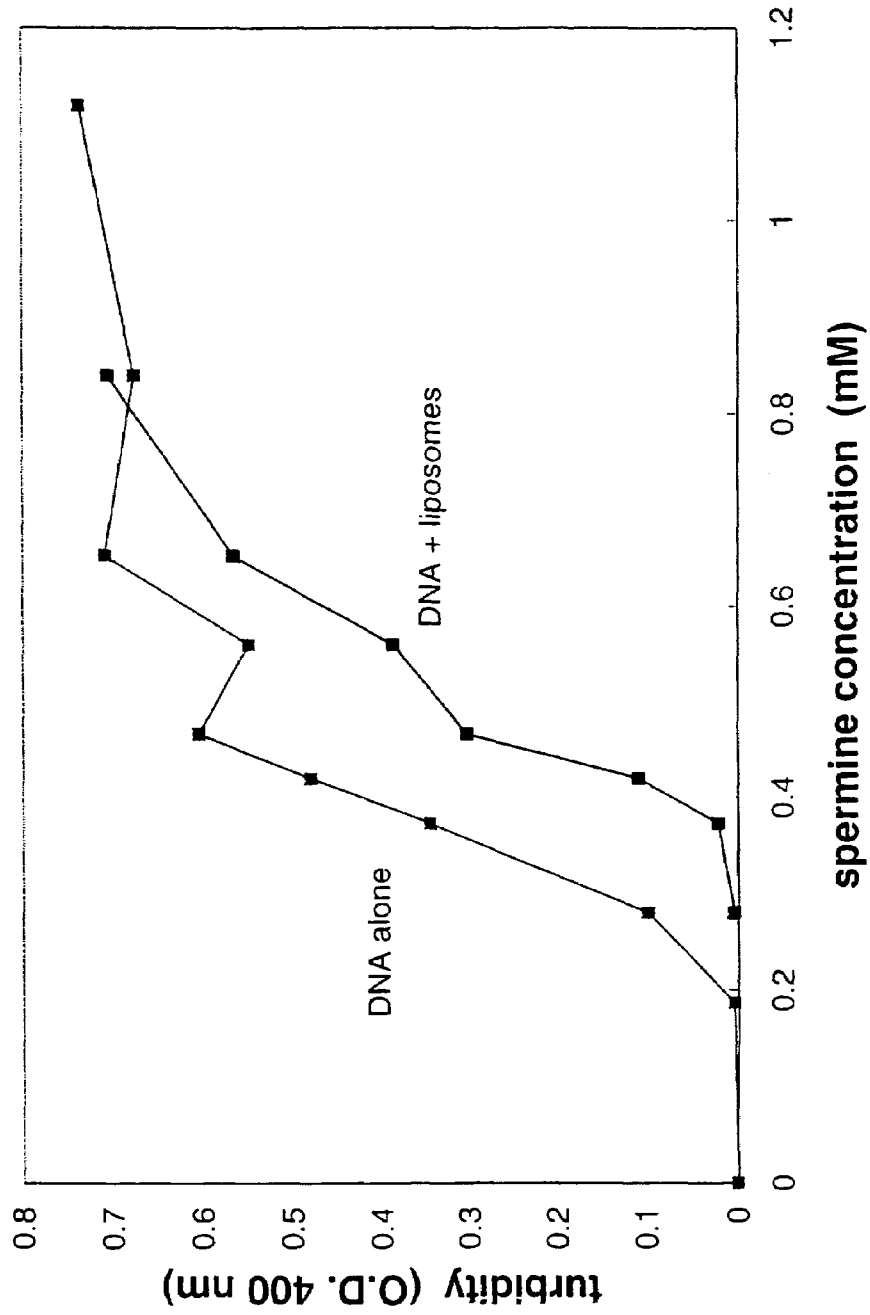


Fig. 3
Spermine partitioning between liposomes and DNA



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