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(54) Title: METHODS FOR ENCAPSULATING POLYNUCLEOTIDES INTO REDUCED SIZES OF LIPID NANOPARTICLES AND NOVEL FORMULATION THEREOF

(57) Abstract: Provided herein are lipid formulations of reduced size, comprising a lipid and a capsid free, non-viral vector (e.g., ceDNA), and methods of producing said lipid formulations. Lipid particles (e.g., lipid nanoparticles) of the disclosure include a lipid formulation that can be used to deliver a capsid-free, non-viral DNA vector to a target site of interest (e.g., cell, tissue, organ, and the like).

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