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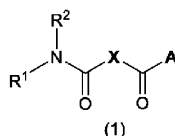
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(54) Title: A COMPOUND FOR PREPARING LIPID NANOPARTICLES ENCAPSULATING AN AGENT, NANOPARTICLE COMPOSITION COMPRISING SAID COMPOUND AND RELATED METHODS THEREOF



(57) Abstract: There is provided a compound comprising a structure represented by general formula (1) or ionized forms thereof for preparing lipid nanoparticles encapsulating a cationic therapeutic and/or cationic prophylactic agent: wherein R1 and R2 are each independently a hydrophobic group; X comprises an optionally substituted linear aliphatic, optionally substituted branched aliphatic and/or optionally substituted cyclic hydrocarbons; and A comprises a peptide sequence of 1-5 anionic amino acids.

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