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(54) Title: PEPTIDE NANOSPONGES FOR DRUG DELIVERY

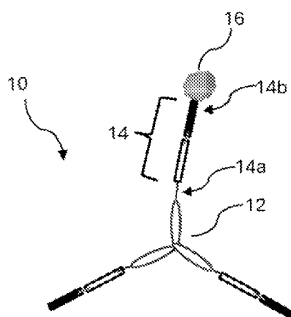


FIG. 1A

(57) Abstract: The present disclosure describes peptide nanospices comprising a plurality of self-assembled peptide building blocks. The plurality of self-assembled peptide building blocks comprises a first peptide building block comprising: a branched polymeric core comprising at least three arms; a first block co-peptide covalently linked to one of said arms, wherein said first block co-peptide comprises a first peptide block and a second peptide block which is different from the first peptide block; a lipid-based capping moiety covalently attached to the first block co-peptide; and a therapeutically active compound covalently attached via a cleavable linkage to the first block co-peptide. Advantageously, the block co-peptide is covalently attached to the core such that it is resistant to enzymatic cleavage from the core.

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