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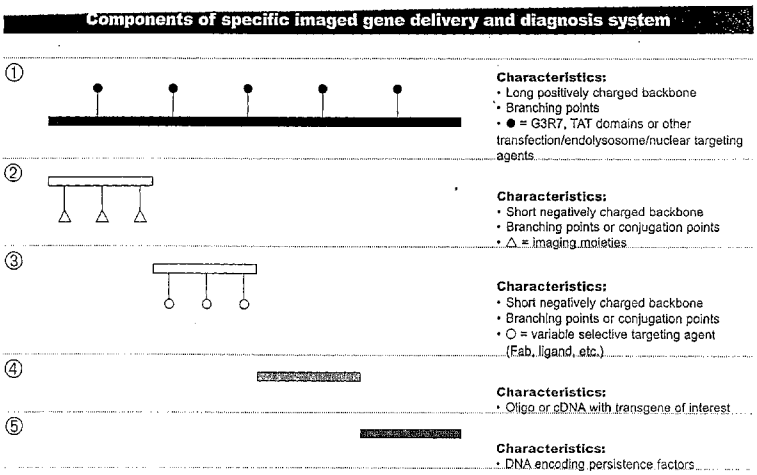
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(54) Title: MULTI-COMPONENT BIOLOGICAL TRANSPORT SYSTEMS



Combinations of components above give enhanced specificity ③, diagnostic imaging ②, and gene delivery ④ with high efficiency ① and persistence ⑤.

(57) Abstract: Compositions and methods are provided that are useful for the delivery of therapeutic agents, including nucleic acids. The compositions comprises a non-covalent association complex of: a) a positively-charged backbone and b) at least two members selected from: I) a first negatively-charged backbone having a plurality of attached imaging molecules; ü) a second negatively-charged backbone having a plurality of attached targetting agents; üi) at least one member selected from RNA, DNA, ribozymes, modified oligonucleotides and cDNA endcoding a selected transgene; iv) DNA encoding at lest one persistence factor; and v) a third negatively-charged backbone having a plurality of attached biological agents; wherein the association complex carries a net positive charge and at least one of the two members from group b) is selected from I) iii) or v).

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