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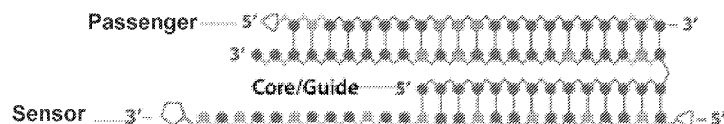
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(54) Title: SIGNAL ACTIVATABLE NUCLEIC ACID COMPLEXES



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FIG. 1

(57) Abstract: Provided herein include conditionally activatable small interfering RNA (siRNA) complexes, components, compositions, and related methods and systems. The siRNA complex can be conditionally activated upon a complementary binding to an input nucleic acid strand through a sequence in a sensor nucleic acid strand of the nucleic acid complex. The activated nucleic acid complex can release a potent RNAi duplex formed by a core nucleic acid strand and a passenger nucleic acid strand, which can specifically inhibit a target RNA.

[Continued on next page]

**Declarations under Rule 4.17:**

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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