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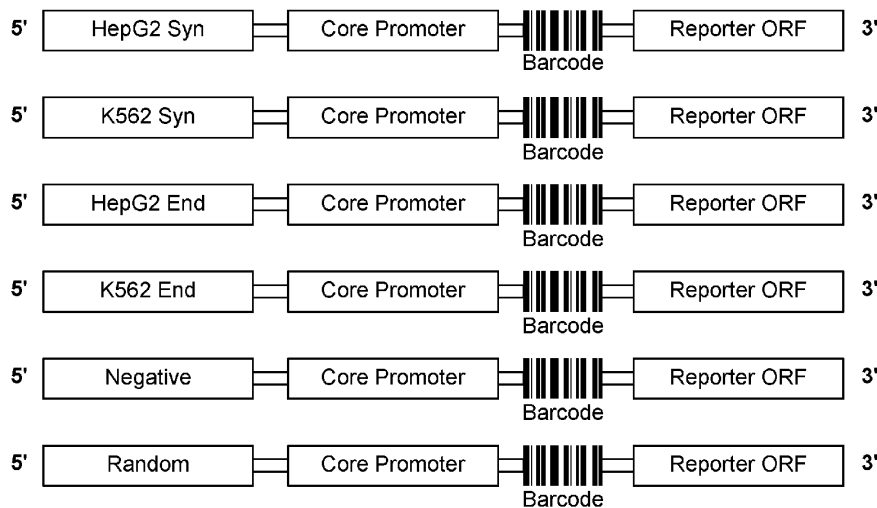


FIG. 2

(57) Abstract: Described herein are switchable core promoters that may selectively promote transcription initiation in the presence of an activated response element, such as an activated enhancer. These switchable core promoters may be paired with cell type- or cell state-specific response element to produce engineered promoters that selectively promote transcription of a payload sequence in a target cell type or target cell state. Also described herein are methods of using switchable core promoters and polynucleotides containing switchable core promoters to selectively express a payload in a target cell type or target cell state.

[Continued on next page]

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