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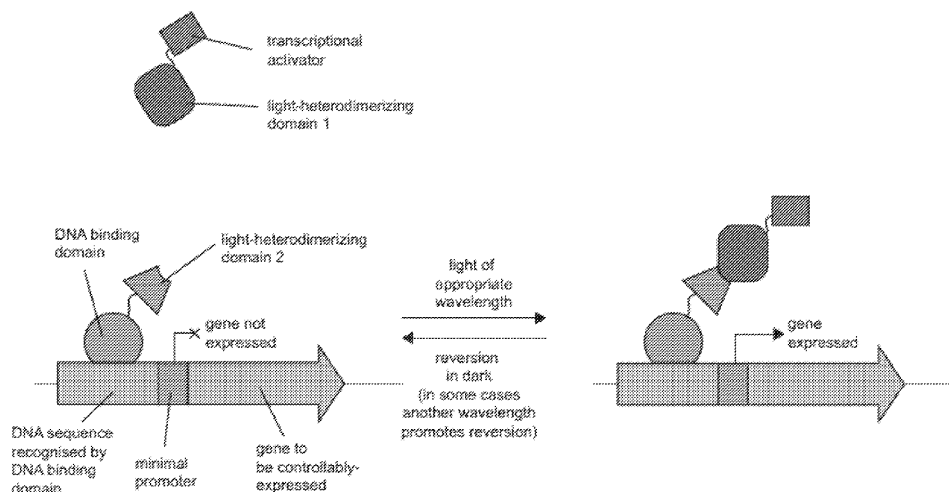


FIG. 1A

(57) Abstract: Provided herein are methods and systems for differentiating cells in a population of cells into a desired cell lineage. In some embodiments, the methods and systems use light (e.g., optogenetics) to control differentiation of cells into a desired cell lineage. In some cases, the methods and systems involve differentiating cells in a suspension culture for large-scale production of cells of a desired cell lineage.

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