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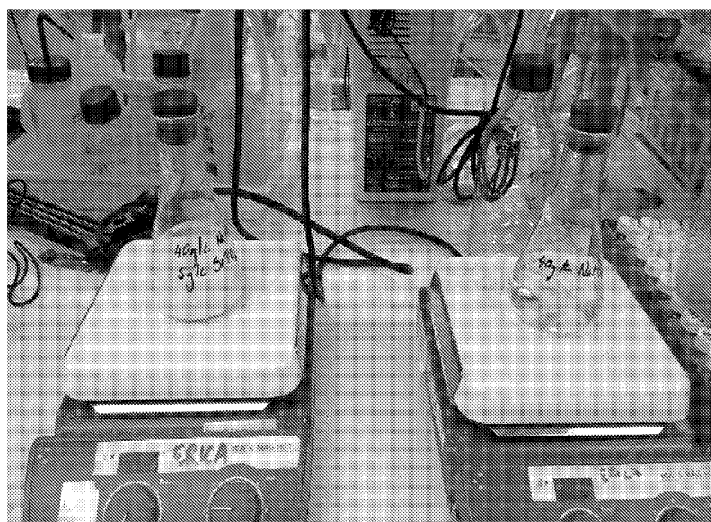


Fig. 2

(57) Abstract: The present disclosure relates to methods, systems and products for converting carbon dioxide to one or more small organic compounds. In certain embodiments, the present disclosure provides a method of converting CO₂ and/or a related form thereof to one or more small organic compounds, the method comprising exposing the CO₂ and/or the related form thereof to a beta particle activated high band-gap semiconductor and thereby converting the CO₂ and/or the related form thereof to the one or more small organic compounds.

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