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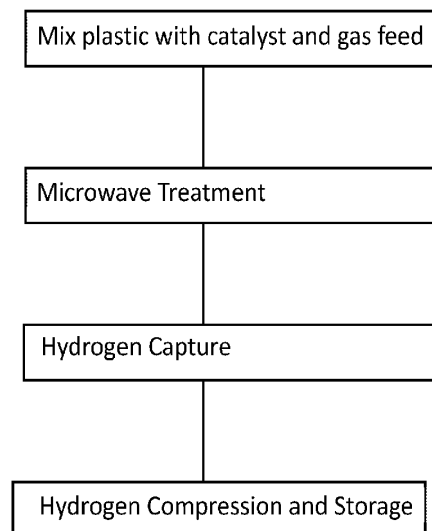
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(54) Title: METHODS AND APPARATUSES FOR PRODUCING HYDROGEN



(57) Abstract: The present disclosure provides methods and apparatuses of producing hydrogen. The methods comprise: (a) contacting a plastic with a catalyst and a gas feed; and (b) applying a microwave at a first temperature. The apparatuses comprise: a reactor for mixing plastic with a catalyst to form a mixture; an inlet for introducing a gas feed; a microwave generator; an optional temperature sensor; and an outlet configured to exhaust the product hydrogen formed in the reactor.

FIG. 1

[Continued on next page]

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