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(54) **Title:** METHODS FOR PRODUCING A TOTAL PRODUCT WITH SELECTIVE HYDROCARBON PRODUCTION

(57) **Abstract:** Methods of producing a total product are described. A method includes contacting a feed with a hydrogen source in the presence of one or more inorganic salt catalysts and steam to produce a total product; and controlling contacting conditions such that the conversion of feed to hydrocarbon gas and hydrocarbon liquid in the total product is between 5 % and 50 %, based on the molar amount of carbon in the feed.

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