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(54) Title: CONDUCTIVE LIQUID HYDROCARBON GAS PLASMA FOR MATERIAL AND CHEMICAL SYNTHESIS AND TRANSFORMATION

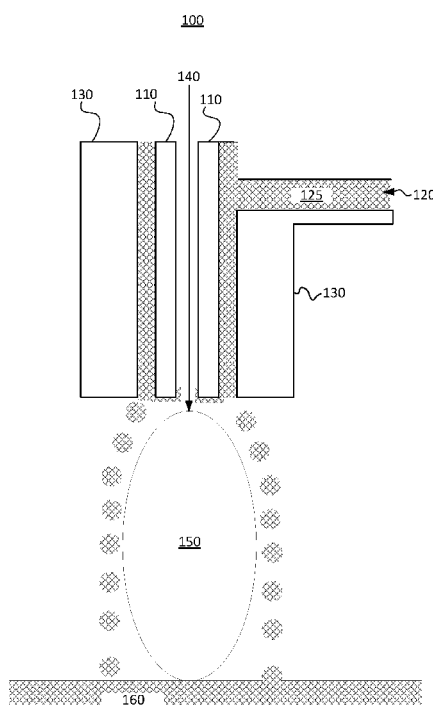


FIG. 1

(57) Abstract: A high voltage discharge between two electrodes generating a plasma is disposed within a reactor chamber. Hydrocarbon gas and conductive liquid are passed over one or more electrodes, such that the conductive liquid cools the electrodes and avoids fouling. Such a discharge may result in hydrogen gas and additional carbon containing coproducts which may be used, released, or sequestered.



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