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(54) Title: MICROWAVE PLASMA APPARATUS AND METHODS FOR PROCESSING FEED MATERIAL UTILIZING MULTIPLE MICROWAVE PLASMA APPLICATORS

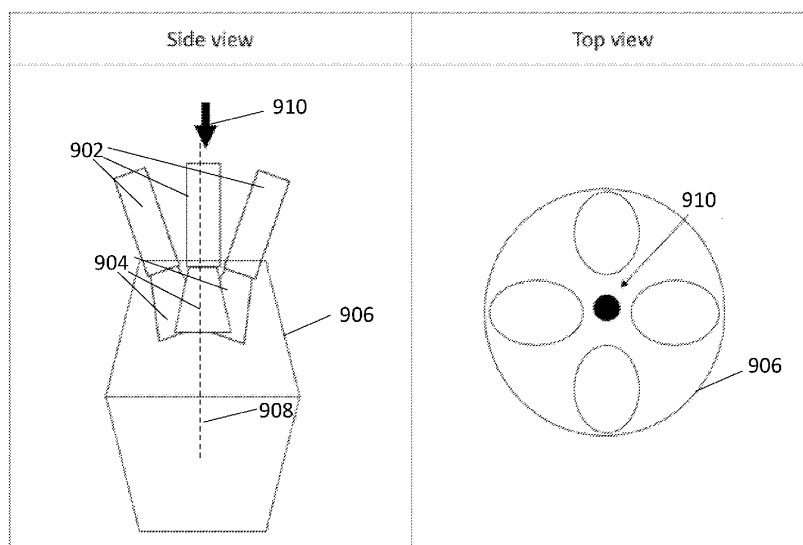


FIG. 9

(57) Abstract: The embodiments disclosed herein are directed to systems and devices which utilize multiple microwave plasmas can be used to increase the efficiency of traditional single microwave plasma systems. Disclosed herein is a microwave plasma apparatus for processing materials which includes a reaction chamber, a plurality of microwave plasma applicators in communication with the reaction chamber, one or more microwave radiation sources, at least one waveguide for guiding microwave radiation from the one or more microwave radiations sources to multiple plasma applicators, and a material feeding system in communication with the reaction chamber.

[Continued on next page]

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