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(54) **Title**: DUAL PLASMA VOLUME PROCESSING APPARATUS FOR NEUTRAL/ION FLUX CONTROL

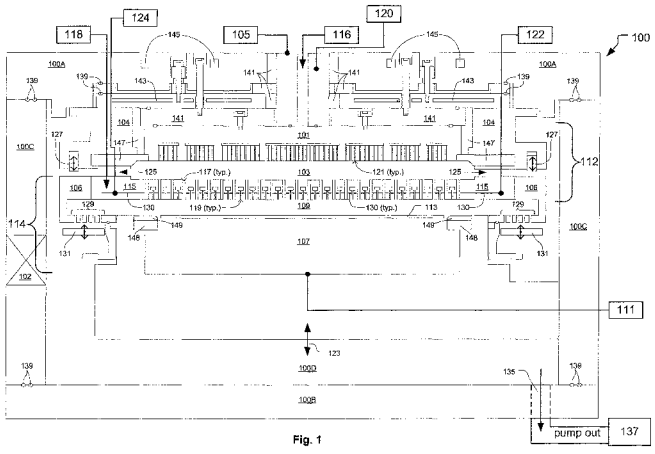


Fig. 1

(57) **Abstract**: A semiconductor wafer processing apparatus includes a first electrode exposed to a first plasma generation volume, a second electrode exposed to a second plasma generation volume, and a gas distribution unit disposed between the first and second plasma generation volumes. The first electrode is defined to transmit radio frequency (RF) power to the first plasma generation volume, and distribute a first plasma process gas to the first plasma generation volume. The second electrode is defined to transmit RF power to the second plasma generation volume, and hold a substrate in exposure to the second plasma generation volume. The gas distribution unit includes an arrangement of through-holes defined to fluidly connect the first plasma generation volume to the second plasma generation volume. The gas distribution unit also includes an arrangement of gas supply ports defined to distribute a second plasma process gas to the second plasma generation volume.

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