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(54) Title: DUAL FREQUENCY PLASMA ETCH REACTOR WITH INDEPENDENT PLASMA DENSITY/CHEMISTRY AND ION ENERGY CONTROL

(57) Abstract: A vacuum plasma chamber for processing a workpiece includes first and second electrodes for electrical coupling with gas in the chamber and respectively connected to first and second relatively high and low frequency RF sources, The chamber includes a wall at a reference potential and a plasma confinement region spaced from the wall. A filter arrangement connected to the sources and the electrodes enables current from the first source to flow to the first electrode, prevents the substantial flow of current from the first source to the second electrode and the second source, and enables current from the second source to flow to the first and second electrodes and prevents the substantial flow of current from the second source to the first source.