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(54) Title: MULTI-RADIUS MAGNETRON FOR PHYSICAL VAPOR DEPOSITION (PVD) AND METHODS OF USE THEREOF

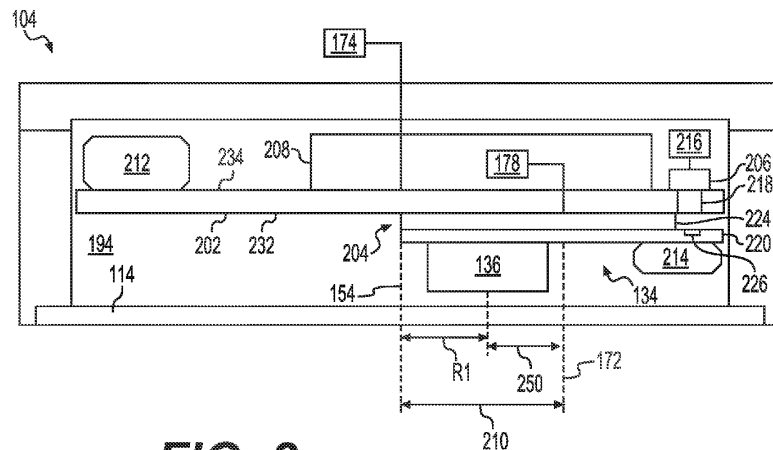


FIG. 2

(57) Abstract: Methods and apparatus for processing a substrate are provided herein. In embodiments, a magnetron assembly for use in a PVD chamber includes: a base plate having a first side, a second side opposite the first side, and a central axis; a magnet plate rotatably coupled to the base plate, wherein the magnet plate rotates with respect to the base plate about an offset axis; a magnet assembly coupled to the magnet plate offset from the offset axis and configured to rotate about the central axis and the offset axis; a first motor coupled to the base plate to rotate the magnet assembly about the central axis; and a second motor coupled to the magnet plate to control an angular position thereof and to position the magnet assembly in each of a plurality of fixed angular positions defining a plurality of different fixed radii.

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