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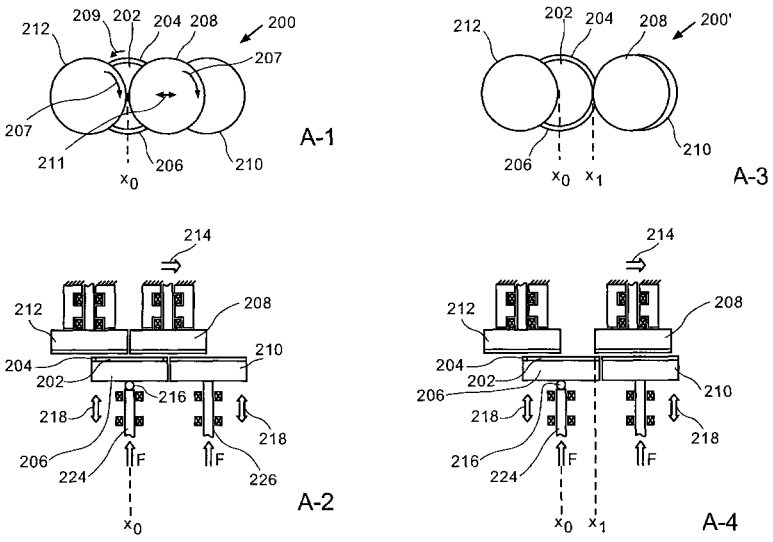
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(54) Title: CMP APPARATUS WITH AN OSCILLATING POLISHING PAD ROTATING IN THE OPPOSITE DIRECTION OF THE WAFER



(57) Abstract: A chemical mechanical polishing (CMP) system (200) is provided. A carrier (206) has a top surface and a bottom region. The top surface of the carrier is designed to hold and rotate a wafer (202) having a one or more formed layers to be prepared. A preparation head (208) is also included and is designed to be applied to at least a portion of the wafer (202) that is less than an entire portion of the surface of the wafer (202). Preferably, the preparation head (208) and the carrier (206) are configured to rotate in opposite directions. In addition, the preparation (208) head is further configured to oscillate while linearly moving from one of the direction of a center of the wafer (202) to an edge of the wafer (202) and from the edge of the wafer (202) to the center of the wafer(202). A support head (212) to support the top face of the wafer is also included, as well as a conditioning head (210).

WO 02/016075 A3

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