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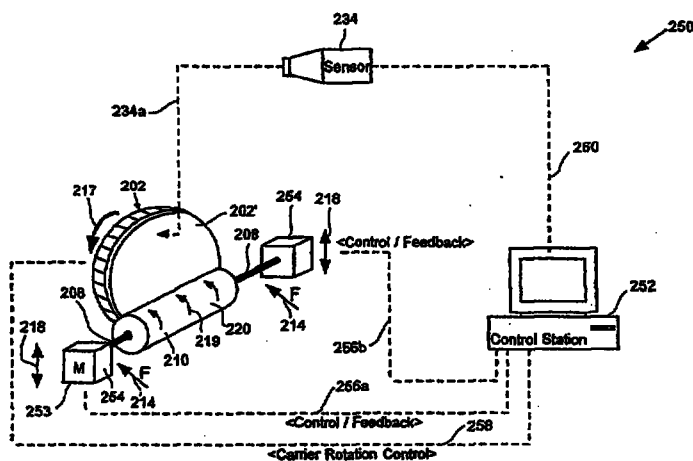
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(54) Title: METHOD AND SYSTEM FOR CHEMICAL MECHANICAL POLISHING WITH A CYLINDRICAL POLISHING PAD



(57) Abstract: A system and method for chemical mechanical polishing, and for the preparation of wafer surfaces (202') is provided. The chemical mechanical polishing system (250) includes a carrier (204) to hold and rotate a wafer (202). The wafer (202) has a surface area (202') and is held by the carrier (204) so that the surface area of the wafer (202) to be processed is exposed. The system further includes a roller (210) that has a process surface (220). The roller (210) is configured to rotate about an axis (215), and the rotating process surface (220) of the roller (210) is applied with force ((214) against the rotating wafer surface (202') defining a contact region (212a) on the wafer (202). The area of the contact region (212a) is less than the surface area (202') of the wafer (202). The contact region (212a) is moved between a first region of the wafer and a second region during the processing of the wafer (202), and the force (214) and linear velocity are manipulated to control a rate of removal.