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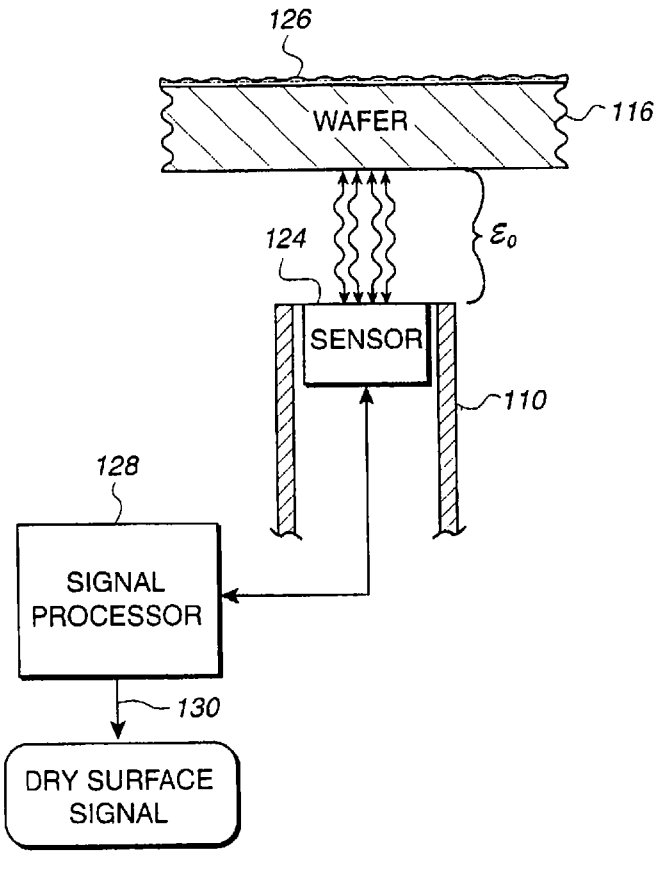
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(54) Title: METHOD AND APPARATUS FOR MONITORING A SEMICONDUCTOR WAFER DURING A SPIN DRYING OPERATION



(57) Abstract: In one method for monitoring a semiconductor wafer during a spin processing operation, a capacitance value between a capacitance sensor (124) and the wafer (116) is measured as the wafer is being spun. When it is determined that the measured capacitance value has reached a desired, e.g., substantially constant, level, a signal (130) is generated indicating that the surface of the semiconductor wafer is in a desired condition. e.g., dry. In another method, light is directed toward a surface of the wafer as the wafer is being spun. The light is directed such that the light that reflects off of the surface of the wafer is substantially perpendicular to the surface of the wafer. The intensity of the light reflected off of the surface of the semiconductor wafer is measured. A signal indicating that the surface of the wafer is in a desired condition is generated when the measured intensity of the light reflected off of the surface of the wafer reaches an intensity level that corresponds to a measured intensity of light reflected off of the surface of the wafer when the surface is in the desired condition. In methods for spin drying a semiconductor wafer, spinning of the wafer is stopped in response to the signal. Apparatus for spin drying a semiconductor wafer including either a capacitance sensor or an interferometric sensor also are described.

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