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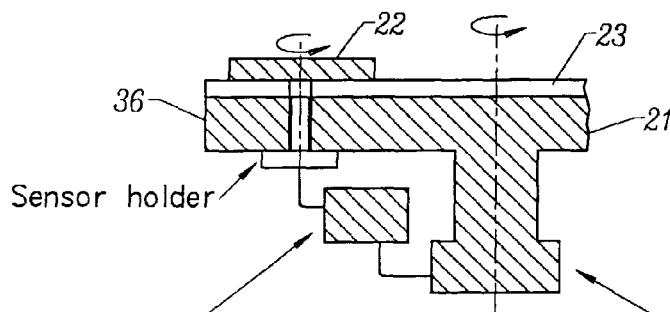
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(54) Title: IN-SITU METHOD AND APPARATUS FOR END POINT DETECTION IN CHEMICAL MECHANICAL POLISH-
ING



Amplifier—houses the electrical
and optical components

Slip coupling transmits signals
through rotating interface

(57) Abstract: A method and apparatus for providing in-situ monitoring of the removal of materials in localized regions on a semi-conductor wafer or substrate during chemical mechanical polishing is proved. In particular, the method and apparatus of the present invention provides for detecting the differences in reflectance (134) between the different materials within certain localized regions or zones on the surface of the wafer. The difference (150) in reflectance are used to indicate the rate or progression (152) of material removal in each of the certain localized zones.



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