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(54) Title: METHOD AND SYSTEM FOR ELECTRONIC SPATIAL FILTERING OF SPECTRAL REFLECTOMETER OPTICAL SIGNALS

(57) Abstract: A method for determining endpoint of plasma processing of a semiconductor wafer includes providing a light source, and providing a lens system to collimate and align light from the light source to an active surface of the semiconductor wafer. A plurality of light detector fibers are interleaved among light source fibers which transmit light from the light source to the lens system. Reflected light from the active surface of the semiconductor wafer is received by a plurality of light detector fibers and provided to an imaging spectrometer. The received reflected light is analyzed by the imaging spectrometer, and matched to a model optical signal. The matched optical signal is selected to determine endpoint or other state of the plasma processing.

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