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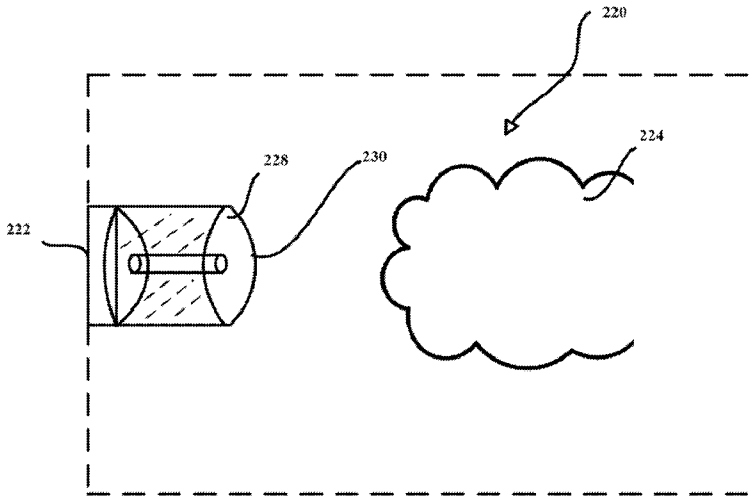


FIG. 2A

(57) Abstract: A method for optical interrogation of plasma during plasma processing in a plasma processing chamber is provided. The method includes providing an optical viewport. The method also includes providing a collimator arrangement. The collimator arrangement is configured with a plurality of collimators, wherein a first collimator of the plurality of collimators is separated by a connecting region from a second collimator in the plurality of collimators. The method further includes collecting optical signals, through the collimator arrangement, from the plasma within the plasma processing chamber while a substrate is being processed, resulting in highly collimated optical signals.

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