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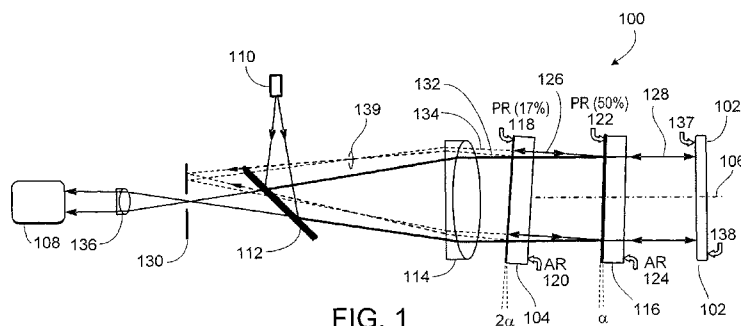


FIG. 1

(57) Abstract: An optical assembly for use in an interferometer is provided. The optical assembly includes first and second partially reflective surfaces positioned along an optical axis and oriented at different non-normal angles to the optical axis. The second partially reflective surface is configured to receive light transmitted through the first partially reflective surface along the optical path, transmit a portion of the received light to a test object to define measurement light for the interferometer and reflect another portion of the received light back towards the first partially reflective surface to define reference light for the interferometer. The reference light makes at least one round trip path between the second and first partially reflective surfaces.