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(54) Title: DEPOSITION SYSTEM HAVING A REACTION CHAMBER CONFIGURED FOR IN SITU METROLOGY AND RELATED METHOD

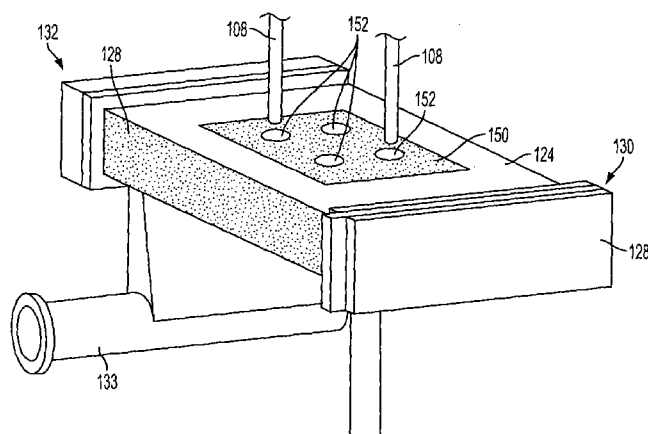


FIG. 2

(57) Abstract: Deposition systems include a reaction chamber (102), at least one thermal radiation emitter (104) for heating matter within the reaction chamber, and at least one metrology device (106) for detecting and/or measuring a characteristic of a workpiece substrate in situ within the reaction chamber (102). One or more chamber walls may be transparent to the thermal radiation and to radiation signals to be received by the metrology device, so as to allow the radiation to pass into and out from the reaction chamber, respectively. At least one volume of opaque material is located to shield a sensor (108) of the metrology device (106) from at least some of the thermal radiation. Methods of forming a deposition system include providing such a volume of opaque material at a location shielding the sensor from the thermal radiation. Methods of using a deposition system include shielding the sensor from at least some of the thermal radiation.