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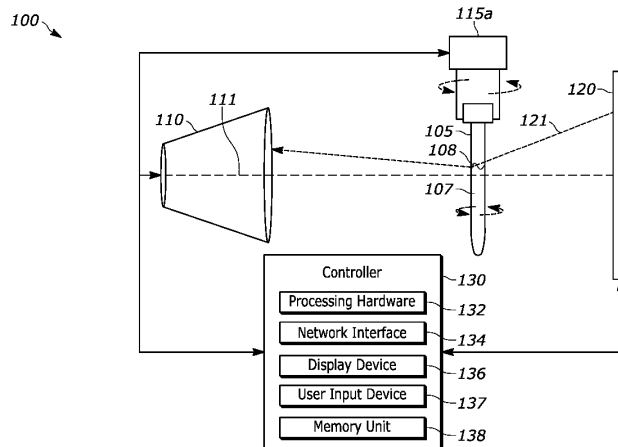


FIG. 1A

(57) Abstract: A system may include a container holder configured to (i) hold a container that houses a sample and (ii) rotate the container axially. A system may include a sensor having a sensing axis that passes through the container. A system may include a controller operatively coupled to the container holder and the sensor and configured to: control the container holder to axially rotate the container, control the sensor to capture sensor data of the container at a plurality of axial rotation angles, analyze the captured sensor data to determine a shape of a top surface of the sample; and based on the shape of the top surface, determine a sample volume.

[Continued on next page]

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