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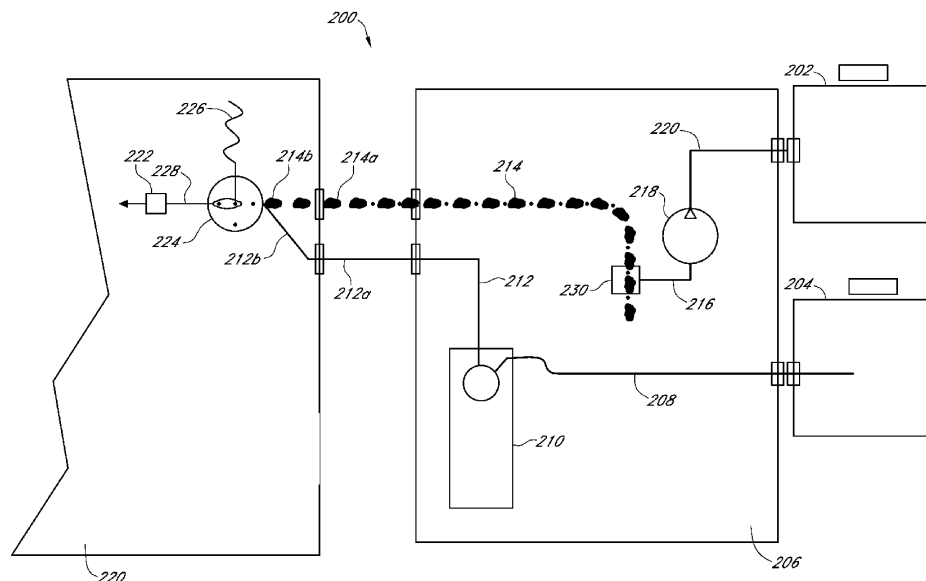


FIG. 2

(57) Abstract: Provided are systems and methods for line volume calibration, and measurement of fluid samples delivered to an interrogation point. In various embodiments, a known fluid volume comprising a sample line fluid and a secondary fluid is delivered to a fluid boundary sensor. The fluid boundary sensor assists in determining the position of the boundaries between the various fluids, and the positions of these boundaries are used to determine the sample line fluid volume.

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