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(54) **Title:** METHODS OF ANALYZING A RESERVOIR FLUID SAMPLE USING A MULTIVARIATE OPTICAL ELEMENT CALCULATION DEVICE

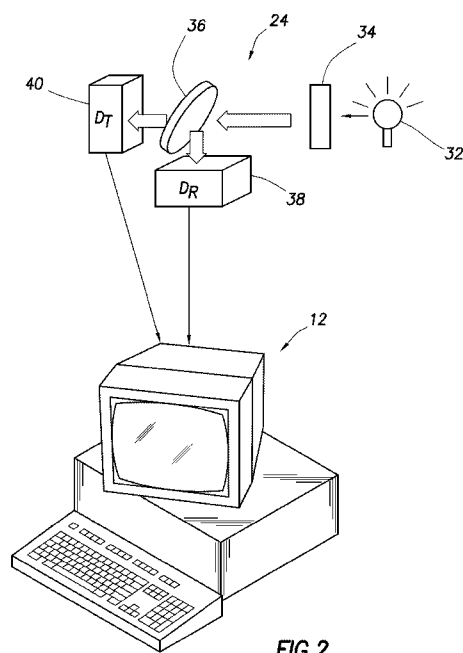


FIG.2

(57) **Abstract:** According to an embodiment, a method of analyzing a fluid sample from a reservoir comprises: collecting the sample in a sampling container, determining at least one property of the sample, wherein the step of determining comprises using a multivariate optical element (MOE) calculation device, and wherein the step of determining is performed during or after the step of collecting. According to an embodiment, the sample is analyzed as the sample flows into the sample container. According to another embodiment, the sample is analyzed as the sample is being transferred from the sample container into a container.