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- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
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(54) **Title:** HANDHELD CHARACTERISTIC ANALYZER

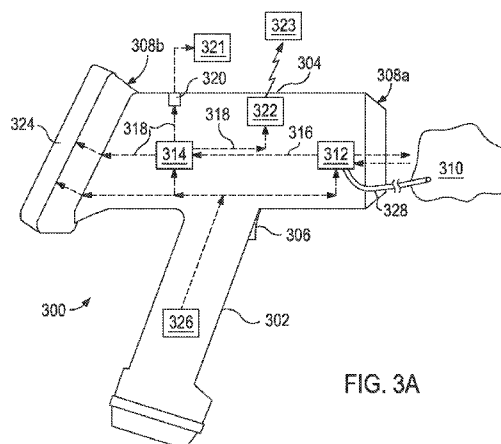


FIG. 3A

(57) **Abstract:** Disclosed is a portable handheld characteristic analyzer (300) used to analyze chemical compositions in or near real-time. The analyzer (300) may include a portable housing (304), at least one optical computing device (312) arranged within the portable housing (304) for monitoring a sample (310), the at least one optical computing device (312) having at least one integrated computational element configured to optically interact with the sample (310) and thereby generate optically interacted light, at least one detector (212, 216; 420) arranged to receive the optically interacted light and generate an output signal corresponding to a characteristic of the sample (310), and a signal processor (314) communicably coupled to the at least one detector (212, 216; 420) for receiving the output signal, the signal processor (314) being configured to determine the characteristic of the sample (310) and provide a resulting output signal indicative of the characteristic of the sample (310).